Manitoba
December, 2002

OFFICE OF THE
AUDITOR GENERAL

Value-for-Money Audits

Public Housing Program
Department of Family Services and Housing

Assiniboine Community College
Investment in Information Technology

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December 2002

The Honourable George Hickes
Speaker of the House
Room 244, Legislative Building
Winnipeg, Manitoba
R3C 0V8

Dear Sir:

I have the honour to transmit herewith my December 2002 report on Value-for-Money Audits to be laid before Members of the Legislative Assembly in accordance with the provisions of Section 28 of The Auditor General Act.

Respectfully submitted,

Jon W. Singleton, CA•CISA
Auditor General

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PUBLIC HOUSING PROGRAM

Department of Family Services and Housing

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From the late 1960s to the mid 1970s much of the Manitoba public housing stock was constructed. As with any capital asset, construction costs represent only part of the life time costs of the property. Routine maintenance and upkeep are continuously required and eventually major repairs such as retrofits, renovations and upgrades will be required. All in an effort to protect the Province's investment in the property and to ensure clients are satisfied.

Our audit work indicates that the Department has done a reasonably good job over the years in ensuring its properties provided shelter of an appropriate quality. As the housing stock ages, however, this task will become increasingly difficult and costly. It is imperative therefore that funds allocated to the maintenance of the public housing stock be used as effectively as possible. We acknowledge that the restructuring within the Department that had occurred at the time of our audit, and as described in our subsequent events note, may contribute significantly to improved performance. I am also pleased to note that the Department is acting to implement improvements to its processes for identifying, prioritizing and scheduling major repairs, as well as, preventive and corrective maintenance. These enhancements will help the Department appropriately deal with the challenges of the future.

For many years I have promoted the need for enhanced performance measurement processes throughout government. Information on goals, outcomes and performance against targets provide the public with valuable information on how effectively tax dollars are being expended. We remain committed to facilitating change in this area. As such, my Office is now in the process of conducting a follow-up audit on the state of business planning and performance measurement throughout government, including the adequacy of central direction and support. In our audit of the Public Housing Program we found several opportunities to develop and gather better performance information. For example, while Department Officials believe they are doing a good job of maintaining the public housing stock, they have insufficient measures and related performance information to support this belief.

As I have noted in other audits, weaknesses in the documentation of management control practices, internal control procedures and important management information impacted the scope of the work that my Office could conduct. Lack of documentation reduces transparency in decision-making, a critical element in government's accountability to the public. This is an ongoing concern. As such I continue to stress to all government administrators and decision-makers the importance of maintaining appropriate and pertinent documentation.

I appreciate the commitment of officials to address or explore further the recommendations included in our report. I encourage them to act on this commitment.

Jon W. Singleton, CA•CISA

Report Summary

ABOUT THE PROGRAM

Provincial housing policy and program delivery are carried out through three entities. They are the Housing Division of the Department of Family Services and Housing, the Manitoba Housing and Renewal Corporation (MHRC) and the Manitoba Housing Authority (MHA).

The purpose and objectives of the public housing, as reflected in The Housing and Renewal Corporation Act are:

- To ensure there is an adequate supply of housing stock in Manitoba;
- To enhance the affordability of, and accessibility to, adequate housing for Manitobans, particularly those of low and moderate income or those with specialized needs;
- To maintain and improve the condition of existing housing stock; and
- To stimulate and influence the activities of the housing market to the benefit of Manitobans as a whole.

Public housing is housing that is owned by governments.

A **housing unit** is defined as a dwelling that houses an individual or a family. For example, a 20 suite apartment building would contain 20 housing units. A single family home would be one housing unit.

A **housing project** is defined as a group of housing units. A project can be one high-rise apartment or a cluster of various building types.

MHRC is the registered owner of a housing portfolio consisting of approximately 16,000 units with an original cost of over $400 million. 12,900 units are managed by MHA, an organization created by MHRC pursuant to its Act. The remaining 3,100 units are managed by various non-profit groups, referred to as sponsors, under operating agreements with MHRC. The Housing Division of the Department monitors compliance to these agreements. The physical maintenance of the entire Provincially owned portfolio is the responsibility of MHA.

REASON FOR THE AUDIT

We conducted this audit because the public housing stock represents a substantial ongoing investment by the Province and the provision of public housing is an important service to Manitobans.

AUDIT PURPOSE, SCOPE AND APPROACH

The purpose of our audit was to answer the following questions:

1. Are housing projects adequately maintained and expenditures for major repairs made with due regard for economy?
2. Are housing projects occupied by eligible tenants?
3. Are eligible applicants placed in a timely and equitable manner?
4. Are vacancies kept to a minimum?
5. Are tenants charged the appropriate rental fee?
6. Are arrears balances kept to a minimum?
7. Does the Department adequately ensure that sponsor-managed housing projects are performing as expected?

Major repairs are referred to by the MHA and the Department as "Modernization and Improvement".

The audit focused on the provincially owned public housing portfolio. For questions 1, 2, 5, 7 our scope was further limited to the Urban and Rural Program.

For questions 2, 3, 4 and 6 we did not audit the completeness and accuracy of the performance information created by MHA or Departmental information systems. This information was used in our analysis of performance.

Our audit was substantially conducted between September 2000 and March 2001.

Our audit included examining available records and conducting interviews of staff of the Department, MHA and sponsor organizations.

With respect to question 1, we visually inspected and developed overall condition assessments for a sample of 20 housing projects.

Our examination was performed in accordance with value-for-money auditing standards recommended by the Canadian Institute of Chartered Accountants, and accordingly included such tests and other procedures as we considered necessary in the circumstances.

> ***The Importance of Adequate Documentation***
>
> *Documentation is not simply an exercise in creating paper files, it is key to demonstrating transparency, a critical element in government's accountability to the public. As such we continue to stress to all government administrators and decision-makers the importance of maintaining appropriate and pertinent documentation. With respect to this audit, in several instances our ability to audit aspects of the Public Housing program was limited by the lack of appropriate documentation of management control practices, internal control procedures and important management information.*

IMPORTANT CONSIDERATIONS

The Department, MHRC and MHA have been impacted by two significant events that happened in 1998 and 1999.

The Social Housing Agreement with the Canada Mortgage and Housing Corporation was signed in September 1998 and as a result, effective October 1, 1998, more than 16,500 housing units were transferred to the Department's portfolio. This transfer effectively doubled the number of units that the Province was responsible for. As a result, the Department needed to develop the organizational capacity to administer the transferred units.

One year later, shortly after the provincial election, the Department of Family Services and the Department of Housing were amalgamated. Although such amalgamations are done to benefit client service, reduce duplication and delivery cost and time, they don't occur overnight. Such transitions provide a timely opportunity to evaluate past practices and procedures and identify changes and courses of action to follow.

Throughout the course of our audit, the Department was in transition. We observed changes to reporting relationships, policies and practices.

During our interviews with staff, we found that many viewed these changes as opportunities to improve the way they were providing service to their clients. In conducting our visual inspections, we were struck by the very apparent desire of many of the front-line people we met to provide quality services and homes to the residents.

CONCLUSIONS AND KEY FINDINGS

In this section we identify significant subsequent events, conclude on each of our seven audit questions and briefly discuss our key findings. In addition, each key finding is accompanied by our recommendations and the Department's response. Our detailed report includes 40 recommendations, 11 are noted in this report summary.

SUBSEQUENT EVENTS

Our audit work was substantially completed by March 31, 2001. Management advised us of the following significant events that occurred near or after that date:

Maintenance

- Responsibility for maintenance of properties and for capital projects was consolidated in the Maintenance Branch (formerly a responsibility shared by the Winnipeg and rural district offices).
- For the Winnipeg District, two maintenance supervisor positions and two maintenance coordinator relief positions were created. Two maintenance supervisor positions were also created for the rural districts.

Property Management

- As a result of the above noted restructuring, the Winnipeg and rural district offices now focus on their property management responsibilities, including vacancy management, arrears collection and the quality assurance process undertaken by District Managers.
- For the Winnipeg district:
  - Two zones were created and an additional manager was appointed.
  - The number of property managers was doubled by increasing the responsibilities of the former assistants. Each property manager is now responsible for approximately 350 - 450 units rather than approximately 750.
  - Three "floating" positions were created (two property managers and one tenant relations officer) to provide assistance with issues in the various portfolios when needed.
  - Eight clerical positions were created. The new clerical positions have assumed many of the clerical responsibilities formerly performed by maintenance coordinators and property managers.
  - Four Winnipeg tenant relations officers were added to the former complement of seven by increasing the responsibilities of former tenant resource workers. Caseload per officer has decreased from approximately 1,000 to 700.

- An Accounts Receivable Branch was created in May 2001 and staffed by six positions. Responsibilities of the Branch include developing repayment plans for tenants who owe the MHA rent from the current or a former tenancy, the processing of claims on former tenants with arrears, and all actions related to the Federal Refund Set-off Program.

Because of the timing of these events, we have not assessed their potential effect on issues raised or on recommendations made. The Department responses to some of our recommendations, which we have reproduced in the detailed report, refer to the impact of these changes on the issues reported.

1. ARE HOUSING PROJECTS ADEQUATELY MAINTAINED AND EXPENDITURES FOR MAJOR REPAIRS MADE WITH DUE REGARD FOR ECONOMY?

With respect to expenditures for major repairs, we concluded that MHA exercised appropriate regard for economy.

With respect to whether housing projects were adequately maintained, we concluded that the results of our sample of visual inspections, overall, spoke well of the efforts of the Department in maintaining housing projects to an appropriate level.

We also concluded, however, that planning processes employed by MHA and the Department, including:

- **performing property inspections,**
- **determining repair priorities,**
- **determining and monitoring the overall effectiveness of the its maintenance effort, and**
- **conducting preventive maintenance,**

were not sufficiently rigorous to:

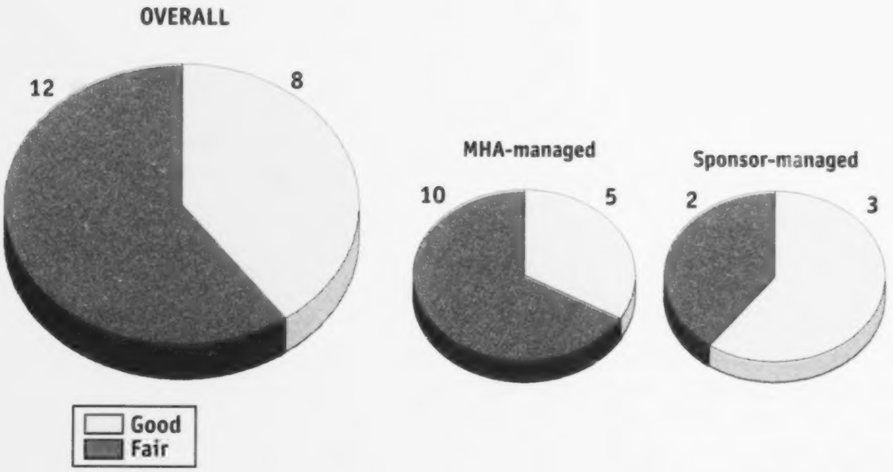
- **ensure that funds allocated to property maintenance would be effectively applied to projects to sustain or enhance current performance levels, and**
- **clearly and convincingly communicate the effectiveness with which allocated funds are expended and the impact of less than adequate funding levels.**

To determine whether housing projects were adequately maintained, we conducted visual, non-intrusive, inspections of a sample of 15 MHA-managed and five sponsor-managed housing projects and assigned physical condition ratings. We attempted to make our sample as diverse, regarding building type and location, as possible. All properties in our sample were constructed between 1969 and 1977. We view these to be of similar age. We noted that much of the Department's housing stock was built within this timeline.

We must stress that the sample was not sufficiently large to be statistically valid. Because of this limitation, the overall results of our sample cannot be interpreted as being representative of the overall condition of the entire housing portfolio. Nonetheless, we believe the results of our sample are useful as they lead us to areas of potential performance successes and shortfalls. With this information we engaged MHA and Departmental officials in discussions regarding likely causal factors.

For the 20 housing projects we visually inspected, eight projects (40%) were assessed as being in good condition and 12 projects (60%) were assessed as being in fair condition. No projects were judged to be in poor condition.

Condition Assessments Based On OAG Visual Inspections



While it may seem best to have all projects assessed as good, such results may not be reflective of a cost-effective approach. In an effort to ensure all resources are utilized to the greatest extent possible, individual building components will, by necessity, be allowed to wear. The key is to prevent failure and secondary damage. As a result it is reasonable to expect a mix of housing projects in good and fair condition, as well as a variation, within a project, of building component ratings.

We did not attempt to determine what proportion of good to fair assessments would be reasonable or representative of a cost-effective approach, for the age and composition of the Manitoba housing stock. However, Management spoke of years of underfunding and of deferrals of major repairs as the likely cause for the greater number of projects in fair condition.

In 1997 the Department prepared a schedule of major repairs that it believed to be necessary over a 10 year horizon. The identified needs for 1998 equalled $22.0 million, for 1999 $14.5 million and for 2000 $15.0 million. In explaining the rationale for needed funding levels, in a document to Treasury Board, management at the time noted the following: *"Budgetary constraints have seriously limited the MHA's ability to complete regular maintenance of the ageing housing stock as well as to respond to urgently required modernization and improvement. Urgent repairs often result in the deferral of preventative maintenance and upgrading the portfolio. Over the long run, deferred regular modernization and improvement results in a poorer condition of individual projects and* *more expensive repairs later on."* We noted that the actual funding levels for the three years noted above were significantly below the identified need.

The impact of a sustained period of underfunding would be cumulative in effect and subsequently difficult to overcome without the infusion of significant additional funds. A direct consequence would be deteriorating unit conditions.

The question we were left with was, "Can the Department sustain or enhance its current level of performance?" (that is, achieving an appropriate ratio of housing projects in good and fair condition). The ageing housing stock has and will continue to increasingly challenge the Department in effectively using its assigned resources. Our conclusion speaks to our concerns in this regard.

Our key findings are discussed in brief below:

The Need For Comprehensive Property Inspections At Regular Intervals

Effective inspections require that building components be examined in detail and judgements made as to condition, remaining useful life and the need for major repairs as well as preventive and corrective maintenance.

For MHA-managed projects, detailed inspections using standardized inspection guides or checklists have not been conducted in a number of years. MHA officials noted that major repair projects for each of their assigned housing projects were identified based on the knowledge they acquired from their general visits and from comments received from the property managers and building superintendents. To gain some insight into the effectiveness of MHA's process for identifying major repair needs, as part of our visual inspection process, we identified needed major repairs, estimated the cost of these repairs and compared these repair projects to those identified in the 10 year major repair plans for each project.

As a result of these procedures, we identified needed repairs totaling an estimated $4.2 million that had not been identified by MHA or the Department in the housing projects' 10 year major repair plans.

The additional needed repairs that we have identified for each of the projects in our sample, are repairs that we believe are necessary over the next 10 years to elevate the projects' condition ratings to good, or to maintain their current good rating. In practical terms we understand that the MHA may allow a good project to slip into fair condition and selectively determine which fair projects to elevate to good. As such, the timing and priority of our identified needed repairs may ultimately differ from that which the MHA would make in full light of the maintenance requirements for the entire portfolio. What we are suggesting is that these decisions be made by the MHA with better information on all needed major repairs than is currently available in the 10-year major repair plans.

Because interiors are a unique challenge, we believe it valuable to discuss the planning of interiors separately from the major repairs of the other property components.

Approximately 40% of the estimated cost of OAG identified additional repairs relate to interiors. It is important to note that the vast majority of these items relate to renovation, that is the replacement of a functional but significantly worn or outdated element, for example, kitchen cabinets, flooring, toilets, and tub surrounds. While many of these repairs impact quality of life (a soft benefit) rather than being a replacement of a broken item, some stakeholders may question the value of such repairs, reasoning that the units are functional as they are. However, in identifying additional needed repairs, we considered the issue of equity (or consistency) between housing projects. In examining the 10 year plans for our selected housing projects, we noted that comprehensive interior upgrades had been identified for five projects but only partially for seven and not at all for three projects, even though all projects were built between 1969 and 1975. We also noted that interior upgrades had been conducted in some units in three of the projects examined. Our identified needed repairs reflect what we believe would be a more consistent approach to the upgrade of unit interiors.

With respect to the other building components combined, we determined that the MHA had appropriately identified needed major repairs for eight of 15 (53%) projects inspected (bearing in mind the limitations of visual inspections and the areas identified as needing more detailed, and likely intrusive, inspections). However, in our view, the potential for inadequate results is high.

For sponsor-managed projects, the Department has developed a reasonably detailed inspection form. For the five projects we examined, we found that inspections were conducted by the Department in 1999 and documented on the inspection forms. Management advised that annual updates are also being performed.

With respect to interior upgrades, we determined that the Department had appropriately identified needed major repairs for all of the five projects we inspected.

With respect to the other building components combined, we determined that the Department had appropriately identified needed major repairs for four of the five (80%) projects we inspected.

We recommend that MHA perform inspections of all housing projects using appropriately detailed standardized inspection guides, and that these inspections be conducted at regular intervals of 2 to 3 years. R1

Department Response
The period of 1999 through 2002 has been a period of change for the Department and the MHA. In 2002, a rigorous annual inspection process was adopted, involving staff teams of experts trained in various disciplines, and an inspection has been completed for all properties in the MHA portfolio.

The Need to Better Prioritize Identified Major Repairs

We found that the repair prioritization process was not sufficiently robust to ensure the appropriateness of the scheduling decisions made and to readily allow the Department and the MHA to communicate the extent to which repairs were being unreasonably delayed because of funding constraints.

Major repairs are prioritized on the basis of five predetermined categories, category (i) being the highest priority and category (v), the lowest. We were advised that the vast majority of repairs are categorized as category (iv), being building functionality. However, we found that a defined process with objective criteria was not in place to prioritise category (iv) repairs, either by housing project or Province-wide. Rather, Officials advised that the availability of funds and the professional opinions of staff involved in managing the housing projects factored heavily in prioritising the category

(iv) repairs. Documented evaluations were not prepared to support the decisions made regarding the relative importance of competing repairs.

We recommend that an appropriately detailed process be developed to rank repairs as to their relative importance and that these rankings be used to allocate available funds. R3

Department Response
In 2002, in addition to having implemented an inspection process, the MHA has deployed a new 5-year capital plan. The new 5-Year Plan no longer makes a preliminary allocation of budget funding by district. As part of developing the new 5-Year Plan, a more detailed process for ranking capital projects according to Province-wide priorities is being developed.

We recommend that all needed major repairs be scheduled in the 10 year major repair plans for each project, and that the plan track the deferral of any needed major repairs. R4

Department Response
This recommendation has been incorporated in the revised 5-year capital planning process.

The Need for a More Structured and Documented Preventive Maintenance Program

An effective preventive maintenance program identifies what maintenance work is required on an ongoing basis and schedules it at appropriate intervals. Preventive maintenance is essential if lifetime costs are to be minimized.

We observed that, for the projects in our sample, inspection and service contracts were in place, with some limitations for rural areas, for certain equipment and maintenance work. Maintenance coordinators we spoke to indicated that building superintendents conducted some preventive maintenance, but that comprehensive preventive maintenance programs that encompassed all building components were not in place.

We recommend that MHA implement a more structured and documented preventive maintenance program. Such a program should include checklists of preventive maintenance tasks by building component and schedules for each task. R8

Department Response
The MHA recognized the need to consolidate capital improvement responsibility with other maintenance functions, including preventive maintenance, and has made organizational changes to support this direction. The development and implementation of a more structured preventive maintenance plan is currently underway.

Other Findings

We found appropriate practices were in place with respect to:

- The development and use of standards and specifications.
- Competitive tendering and contract management.

Other findings included in the detailed report deal with the need to:

- Base the initial allocation of major repair funds on prioritized needs.
- Include average life expectancies when determining repair priorities.

- Develop performance indicators of the adequacy of the overall maintenance effort.
- Ensure that comprehensive fire safety plans are in place.
- Prepare adequate support for cost estimates included in the 10 year major repair plans.
- Develop records of the total maintenance program.
- Approach certain repairs more 'holistically'.
- Develop centralized appliance inventories and replacement plans.

2. ARE HOUSING PROJECTS OCCUPIED BY ELIGIBLE TENANTS?

For our sample of 108 tenant files, we concluded that the tenants were appropriately assessed against six of the seven eligibility criteria. Because of the lack of documentation, we could not determine whether applicants' were appropriately assessed against the criterion dealing with behavioural suitability.

Our key findings are discussed in brief below:

The Need To Document All Aspects Of Eligibility Assessments

One eligibility criterion deals with the behavioral suitability of an applicant and involves conducting reference checks with prior landlords. 37 files from our sample of 108 were for tenants placed subsequent to 1995. Of these 37 files, only one file included documentation of a reference check. Because of the lack of documentation, we could not determine whether property managers adequately assessed the applicants' eligibility under this criterion.

We recommend that MHA and sponsors document the results of reference checks for behavioural suitability in tenant files. R15

Department Response

Reference checks for applicants may be difficult to obtain. Many MHA applicants do not have tenancy history. Management agrees, however, that all attempts at reference checks – successful or not – will be documented in the Tenant Management System.

The Need To Better Understand The Extent To Which Units Are "Under-Filled"

For MHA-managed projects, we compared the recorded size of households living in the 1,488 occupied housing units in our sample to the National Occupancy Standard. We identified 60 instances (4%) where the household size was smaller than the National Occupancy Standard for the size of unit. For example, a household of two persons (the tenant and one dependent) living in a three bedroom unit.

However, information was not readily available on the extent to which under-filling of units was occurring or reasons for it. We understand that there may be many valid reasons for under-filling housing units. However, we also believe that there is a cost associated with this practice because under-filled units represent a sub-optimal use of the property. As such, the extent to which under-filling is occurring and the benefits derived from this strategy should be well understood and managed by the Department and the MHA.

We recommend that the Department and the MHA periodically assess the extent to which underfilling of housing units is occurring and the reasons for it. Based on this information, appropriate strategies should be enacted. R17

Department Response
The Department will explore this recommendation. Property managers and district managers are generally aware of the degree of underfilling in their portfolios. During the annual lease renewal process, when family information is submitted for review, staff regularly review the appropriateness of the housing unit. New applicants are typically housed in accordance with the National Occupancy Standards; however, subsequent changes in household size may occur over time (e.g., death in the family); the MHA does not insist that a family move out of their home because of a change in family size/status.

Other Findings

We found that:

- Eligibility criteria are clearly defined and communicated.

Our other finding discussed in the detailed report deals with the need to:

- Develop an effective quality assurance review process for tenant files.

3. ARE ELIGIBLE APPLICANTS PLACED IN A TIMELY AND EQUITABLE MANNER?

While MHA has developed an automated process to facilitate the timely and equitable placement of applicants, because of limited documentation of 'point-in-time' applicant priority rankings, we were unable to assess whether the automated process significantly influenced placement decisions. Nonetheless, we observed opportunities to more effectively manage the timely placement of top priority applicants and the waiting list of approved applicants.

It is important to note that we did not assess the appropriateness of placement priority assigned to each approved applicant.

Key indicators for demonstrating the effectiveness of the program's placement process would include the size and growth of waiting lists relative to unit vacancies, the demonstrated ability to appropriately prioritize approved applicants and the length of time needed to place top priority applicants.

As at March 31, 2001, the waiting list had grown to 2,832 applicants, (an increase in one year of 612 applicants or just over 28%). Since March 31, 1998, MHA has experienced a 76% (1,227 applicants) increase in the number of approved applicants on its waiting lists.

The significant growth in the waiting lists despite MHA's efforts at reducing the number of vacant units, as discussed in question 4, challenges MHA and the Department regarding their stated mission to "assist Manitobans to have access to adequate and affordable housing."

Our key finding is discussed in brief below:

Not Always Possible to Place Top Priority Applicants in a Timely Manner

The MHA seeks to place its top priority applicants within ten days to coincide with the typical crisis shelter timeline for the provision of emergency shelter. We examined the October 2, 2000 and December 31, 2000 Province-wide waiting lists. Not including transfers and cancellations, there were 20 top priority applicants on the lists. Nine applicants were not housed within MHA's target of ten days. While management acknowledged the need to place top priority applicants in a more timely manner, they advised us of placement difficulties because of client location preferences and the lack of available vacant units thereat.

When we began our audit we observed that there was no central tracking and coordination for the placement of top priority applicants. In November 2000, the Marketing and Promotions Branch of MHA began, for the Winnipeg district, to centrally track and coordinate the placement of top priority applicants.

We recommend that the MHA monitor its performance regarding the length of time to place top, high, mid and low priority applicants. Based on this information, appropriate strategies should be enacted. R20

Department Response
The Department will explore this recommendation. Applicants on the waiting list are housed as soon as it is possible to do so, in accordance with housing need. However, the MHA cannot house unless there is an available and appropriate unit in a location of the tenant's choice. Accordingly, with respect to Priority Placement applicants, the MHA always attempts to house these high priority tenants within the suggested 10-day period.

Other Findings

Other findings included in the detailed report deal with the need to:

- Prepare documentation to support placement decisions.
- Review the appropriateness of all priority point ratings of '0'.
- Ensure waiting lists are updated annually.

4. ARE VACANCIES KEPT TO A MINIMUM?

As measures of how successfully vacancies are kept to a minimum, we analyzed the level of vacancies incurred by MHA and sponsors on an overall basis, by geographic location, by specific type of unit and by specific housing project.

While vacancies in MHA's Winnipeg properties have significantly decreased since 1998, we concluded that further actions were needed to minimize chronic vacancies, particularly in the rural districts, and to reduce unit turnovers. We acknowledge that MHA faces significant challenges in managing vacancies, mainly with respect to client preferences for locations and unit types and the lack of applicants in certain rural locations.

Unit vacant months lost refers to the total number of months that in-service units were vacant during the year.

With respect to the Winnipeg District, vacancies have decreased significantly since 1998 and, as at March 31, 2001, the vacancy rate was 3.7%. While the District had also experienced a significant decrease in "unit vacant months lost", as at March 31, 2001, the unit vacant months lost remained, in our view, significant at 5,400. Chronic vacancies had decreased sharply in fiscal 2001, but we noted that studio units remained a problem. In addition, we noted that turnovers remained high at approximately 30%.

With respect to the Rural Districts, vacancy rates have remained relatively unchanged since 1998 at approximately 11% as have unit vacant months lost at approximately 7,000. Turnovers also remained high at 27%. We noted that chronic vacancies accounted for 75% of vacancies (412 of 552) and that studios, one and three bedroom suites remained a significant challenge. Of particular note is that 41 of the 412 (10%) chronically vacant units were located in one northern community experiencing severe economic difficulties.

In this report, **actionable vacancies** refers to unit vacancies of two or more consecutive months, but not including the month following the date the unit was vacated (typically a transitional month).

Our key finding is discussed in brief below:

Need For Comprehensive Action Plans To Address Projects With Significant Chronic Vacancies

As noted above, chronic vacancies are a significant challenge for MHA. The lost revenue associated with such vacancies is high. The Unit Vacant Months Lost figure helps to quantify this cost. Focusing on the fiscal year 2001, when we factor out unit month vacancies resulting from unit turnovers, the Winnipeg district experienced "actionable" unit month vacancies of approximately 3,100. In dollar terms, assuming monthly rentals of $330, the revenue lost was approximately $1,019,000.

The impact of unit vacant months lost is more pronounced in the rural districts where actionable vacancies have only decreased slightly since 1998 (from 5,600 to 5,200). In dollar terms, for fiscal year 2001, assuming monthly rentals at $330, the revenue lost was approximately $1,703,000.

While management spoke of many initiatives aimed at managing the occurrence of vacancies and unit turnovers in general, specific documented plans have not been developed in relation to noted problem areas or housing projects. Given the uniqueness of each housing project, tailored action plans would link specific initiatives to the unique characteristics or circumstances giving rise to the chronic vacancies within a housing project. Planning efforts should seek a coordinated/integrated approach, by housing project, to initiatives such as marketing, client service, unit condition and alternative uses.

We recommend that the Department and the MHA develop coordinated and comprehensive action plans for projects with high levels of chronic vacancies. R23

Department Response
Action plans are developed for units and projects with high levels of chronic vacancy, including possible changes in unit use and various marketing strategies. There are many complex factors that contribute to unit vacancy. Documentation of action plans will be enhanced. Management wishes to emphasize the significant decrease in unit vacancy that has occurred in Winnipeg (representing more than 1/2 of the portfolio) since 1998.

Other Findings

Other findings included in our detailed report deal with the need to:

- Gather information on the reasons for unit turnovers.
- Improve performance measurement.

5. ARE TENANTS CHARGED THE APPROPRIATE RENTAL FEE?

For our sample of 108 tenant files, we concluded that for both MHA and sponsor-managed housing projects, rental charges are appropriately calculated based on the information provided by the tenants. However, income verification practices should be strengthened.

We recommend that, for RGI tenants, the MHA and the Department include income verification in their quality assurance review processes. R27

Department Response
The MHA pursues current pay information, where applicable, in addition to the previous year's income tax information for RGI tenants. In situations where income verification has not been made available, the MHA employs appropriate strategies with the tenant to obtain this information and remain tenanted. The Department agrees to include income verification in the MHA's quality assurance process.

6. ARE ARREARS BALANCES KEPT TO A MINIMUM?

As measures of how successfully arrears are kept to a minimum, we analyzed the level of current and past tenant arrears overall and by geographic location.

In our view, the significant increase in current tenant arrears since 1998/99 and the substantial write-offs of arrears each year since 1997/98 indicate that MHA should intensify their efforts to minimize the initial occurrence and subsequent growth of arrears.

MHA has experienced a significant increase in current tenant arrears in both the Winnipeg and Rural District Offices. Since March 31, 1999 the Winnipeg District Office arrears have doubled to $189,351 (as at March 31, 2001). Rural District arrears have increased within this timeframe by 31% to $108,059.

Write-offs of past tenant arrears from fiscal year 1998 to 2001 totalled approximately $1,885,000.

Our key finding is discussed in brief below:

The Need For Alternative Collection Approaches For Tenants On The Employment Income Assistance (EIA) Program

Although the opportunity exists, MHA does not insist that all EIA tenants have their rents paid directly by the EIA program. We note that many EIA tenants opt for this service. MHA management advised that it would consider requiring direct payment only if an EIA tenant fell into arrears. They believe such an approach would be more consistent with the philosophical mission of the Department.

Because of its reluctance to insist that all EIA tenants have their rent paid directly by the EIA program, MHA has incurred rental arrears write-offs since 1997/98 totalling $764,000 and increased its arrears follow-up effort.

We recommend that MHA promptly require direct ongoing payment of rent from the EIA program for EIA tenants that demonstrate difficulty in meeting rental obligations when due. R29

Department Response

Since coming under the umbrella of one Department, the MHA and the EIA program have been working collaboratively to define and strengthen protocols between the two programs. Enhanced protocols call for the MHA to request direct payment from EIA if a tenant's rent has not been received by the 20th of the month.

Other Finding

Our other finding discussed in the detailed report deals with the need to:

- Clarify collection policies.

7. DOES THE DEPARTMENT ADEQUATELY ENSURE THAT SPONSOR-MANAGED HOUSING PROJECTS ARE PERFORMING AS EXPECTED?

We concluded that the Department's analytical and assessment processes should be strengthened to provide a greater level of assurance that sponsor-managed housing projects are performing as expected and complying with their operating agreements.

Our key findings are discussed in brief below:

The Need For Operational Reviews To Be Conducted More Frequently

Operational reviews consist of on-site visits at which the practices and performance of the sponsor group, in a number of functional areas, are reviewed and compared with Departmental expectations. They are a key activity for ensuring compliance with Department guidelines and expectations. Operational reviews of sponsor operations have not been conducted since April 1999. In December 2000 the Department developed an operational review plan. The plan scheduled 13 reviews to the end of 2003/04. While management referred to a risk based approach, the decision-making process and the rationale for the inclusion or exclusion of housing projects was not documented. We agree that a risk based approach to selecting projects or determining review scope is a valuable approach, however, it should not preclude the review, in varying degrees of detail, of all projects within a reasonable timeframe. Given that there are 52 sponsor-managed housing projects, at this pace it would take 13 years to review all the projects. In our view, this is not a sufficiently aggressive plan.

We recommend that the Department develop a 3-5 year operational review plan that includes all sponsor-managed projects.
We also recommend that the risk based approach and decisions be documented. R34

Department Response
The Department will explore this recommendation. Department staff maintain a close working relationship with the projects they are responsible for. Such ongoing monitoring, combined with regular reporting requirements, serves to identify those projects for which a detailed operational review may be warranted, supporting the risk-based approach. Documentation of the risk based approach and the selection of projects for monitoring will be enhanced.

The Need To Better Ensure Significant Excess Funds Are Remitted By Sponsors On A Regular Basis During The Year

We found that Portfolio Officers need to be more diligent in ensuring that Sponsors remit excess cash balances in a timely manner. We examined the annual analysis prepared by the Corporate Services Branch of cash balances held by the sponsor groups as at March 31, 2000. We found three sponsors with excess cash balances totalling approximately $323,000 (ranging from $ 54,000 to $193,000). We noted that the sponsors were allowed to retain these excess funds a full year.

Other Findings

Other findings included in our detailed report deal with the need to:

- Update operating agreements with most sponsors.
- Make the operational review questionnaire more specific.
- Follow-up on concerns identified during operational reviews.
- Take more timely action regarding potential over-expenditures.
- Review audited financial statements on a more timely basis.
- Ensure all auditors' management letters are obtained and reviewed.
- Develop monitoring expectations.
- Strengthen the budgeting process.

About the Program

VISION AND MISSION

In the fall of 1999, the Department of Family Services and the Department of Housing were amalgamated to form the Department of Family Services and Housing. The strategic direction of the Department is captured in its vision and mission as follows:

> **Vision**
>
> *The Department of Family Services and Housing is committed to social, economic and labour market inclusion for all citizens. We strive to ensure that people feel accepted, valued and safe. We work with the community to support Manitoba children, families and individuals to achieve their full potential.*
>
> **Mission**
>
> *Family Services and Housing will:*
>
> - *provide financial support to Manitoba citizens in need while assisting them to achieve greater self-sufficiency and independence.*
> - *support persons with disabilities to achieve full participation in society.*
> - *keep children safe and protected and assist people facing family violence.*
> - *promote the healthy development and well-being of children and families.*
> - *assist Manitobans to have access to adequate and affordable housing.*

Excerpt from *The Housing and Renewal Corporation Act*

Purpose and objects

2 The purpose and objects of this Act are:
a) to ensure there is an adequate supply of housing stock in Manitoba;
b) to enhance the affordability of, and accessibility to, adequate housing for Manitobans, particularly those of low and moderate income or those with specialized needs;
c) to maintain and improve the condition of existing housing stock; and
d) to stimulate and influence the activities of the housing market to the benefit of Manitobans as a whole.

In pursuing its mission to *"assist Manitobans to have access to adequate and affordable housing"* the Provincial government has pursued a number of strategies including:

- construction and ownership of housing stock.
- provision of subsidized rentals.
- provision of housing assistance programs.
- provision of subsidies to not-for-profit groups that provide housing.
- mortgage, loan and grant assistance programs.

In this audit we focused on the management of the Provincially owned housing stock.

The housing portfolio comprises a number of building types designed to meet the needs of its family, elderly and special needs tenants. The types of buildings range from multiple unit high-rise apartment complexes to single family homes. The size of the units range from studio suites to five bedrooms.

Public housing is housing that is owned by governments.

A **housing unit** is defined as a dwelling that houses an individual or a family. For example, a 20 suite apartment building would contain 20 housing units. A single family home would be one housing unit.

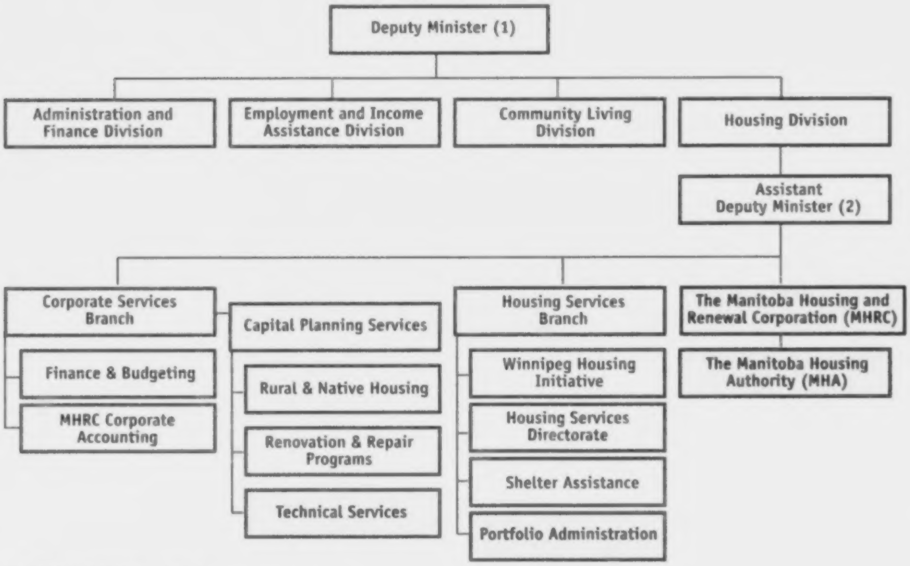
A **housing project** is defined as a group of housing units. A project can be one high-rise apartment or a cluster of various building types.

ORGANIZATION

Provincial housing policy and program delivery are carried out through three entities. They are the Housing Division of the Department of Family Services and Housing, The Manitoba Housing and Renewal Corporation (MHRC), and the Manitoba Housing Authority (MHA).

FIGURE 1

Department of Family Services and Housing Organization Chart
(as at March 31, 2001)


Deputy Minister (1)
Administration and Finance Division
Employment and Income Assistance Division
Community Living Division
Housing Division
Assistant Deputy Minister (2)
Corporate Services Branch
Finance & Budgeting
MHRC Corporate Accounting
Capital Planning Services
Rural & Native Housing
Renovation & Repair Programs
Technical Services
Housing Services Branch
Winnipeg Housing Initiative
Housing Services Directorate
Shelter Assistance
Portfolio Administration
The Manitoba Housing and Renewal Corporation (MHRC)
The Manitoba Housing Authority (MHA)

(1) MHRC and MHA Board Chair
(2) MHRC and MHA Vice-Chair and Chief Executive Officer

Source: Department of Family Services and Housing

The Housing Division of the Department of Family Services and Housing

The Housing Division has overall responsibility for the development, delivery and administration of Provincial housing policy and programs.

The Housing Division is organized into two branches, Housing Services and Corporate Services.

The Housing Division employs all the staff necessary to support the operations of MHRC and provides planning, research, financial, human resource management, legal, and information technology services to MHA.

The Portfolio Administration unit of the Housing Services Branch monitors the operating agreements in place with 44 sponsor organizations that manage 52 housing projects owned by the Province. These projects comprise 3,160 units of the Province's portfolio of 16,037 owned units. Prior to April 1, 1999, sponsors were monitored by MHA. The Portfolio Administration unit also monitors the operating agreements in place for the private not-for-profit housing portfolio transferred from the federal government under the 1998 Social Housing Agreement with the Canada Mortgage and Housing Corporation (CMHC). This Agreement transferred administrative responsibility to the Province for approximately 16,500 housing units that are primarily owned by non-profit organizations.

The Technical Services Unit provides technical support and inspection services and assists in developing long-range major repair plans for the sponsor-managed housing projects.

The Manitoba Housing and Renewal Corporation

MHRC is a crown corporation created 1967 pursuant to *The Housing and Renewal Corporation Act*. It is governed by a board of directors with policy direction from the government. The Lieutenant Governor in Council appoints the board. The Department's Deputy Minister is the board's Chairperson and the Assistant Deputy Minister of the Housing Division is the Chief Executive Officer.

MHRC administers mortgage, loan and grant assistance programs and is the registered owner of all Provincial housing assets comprising 16,037 units built and operated under various public housing program initiatives. The original cost of these Provincially owned housing assets was just over $400 million.

MHRC is financially dependent upon the Province of Manitoba. MHRC generates revenue from a number of sources including rent from its housing portfolio. MHRC receives an annual transfer payment from the Department essentially equal to the difference between its revenues and expenses less recoveries from the Canada Mortgage and Housing Corporation under the Social Housing Agreement.

For this audit we limited our scope for certain of our audit questions to housing projects under the Urban and Rural Program. The Urban and Rural Program comprises 72% (11,571 units) of the Provincial housing stock, as noted in Figure 2. The program ran from the late 1960s to the early 1980s. Under the program, costs to construct new housing projects were financed by the Federal and Provincial governments on a 90/10 basis respectively. Once completed, the project's operating costs, including debt repayment, were shared equally. Currently under the Social Housing Agreement, the Federal contribution for operating costs is now fixed at the 1995/96 level. The program's objective is to assist low-income individuals, families and the elderly to obtain affordable, adequate and suitable housing accommodation in the housing projects constructed under the program. Applicants under the program are selected on the basis of being financially unable to obtain affordable, suitable and adequate housing in the private market. Residents pay rent based on a rent-geared-to-income scale.

Public Housing Program Initiatives

- Limited Dividend Program
- Rural and Northern Rentals Program (pre-1986)
- Rural and Northern Rentals Program (post-1985)
- Regular - City of Winnipeg
- Urban and Rural Program
- Public Non-profit Program (pre-1986)
- Public Non-profit Program (post-1985)
- Public Non-profit Special Needs Program

FIGURE 2

Provincial Housing Portfolio at March 31, 2001

	Winnipeg		Rural		Total	
MHRC Ownership	**Projects**	**Units**	**Projects**	**Units**	**Projects**	**Units**
MHA-managed:						
Urban and Rural Program	101	5,538	186	3,549	287	9,087
Other Programs	57	2,041	232	1,749	289	3,790
Total MHA-managed	158	7,579	418	5,298	576	12,877
Sponsor-managed:						
Urban and Rural Program	21	2,259	13	225	34	2.484
Other Programs	6	399	12	277	18	676
Total Sponsor-managed	27	2,658	25	502	52	3,160
Total MHRC Ownership	185	10,237	443	5,800	628	16,037

Source: Department of Family Services and Housing

Manitoba Housing Authority

The Manitoba Housing Authority was created in 1992 under The Housing and Renewal Corporation Act. MHA operates under the direction of a board of directors appointed by the Minister of the Department. The Department's Deputy Minister is the board's Chairperson and the Assistant Deputy Minister of the Housing Division is the Chief Executive Officer.

MHA provides the property management function for 12,877 of the 16,037 Provincially owned housing units. MHA employs approximately 400 staff and is completely financed by MHRC.

The Maintenance Branch of MHA is responsible for the development of long range major repair plans for MHA. The Branch is also responsible for integrating the sponsor-managed 10 year major repair plans into the 10 year major repair plan for all Provincially owned properties. The Branch is responsible for carrying out the major repairs identified in the plans for both MHA and sponsor-managed properties.

THE PROGRAM DELIVERY COSTS

A summary of the financial results relating to provincially owned properties is shown in the Figure 3.

FIGURE 3

FINANCIAL RESULTS - Provincially Owned Properties

	As At March 31, 2001 (000s)									As At March 31, 2000 (000s)
	MHA-managed			Sponsor-managed			Total by Program			
	Urban & Rural Program	Other Programs	Total	Urban & Rural Program	Other Programs	Total	Urban & Rural Program	Other Programs	Total	Total
Rental Revenue	$ 31,112	$ 15,199	$ 46,311	$ 8,945	$ 3,232	$ 12,177	$ 40,057	$ 18,431	$ 58,488	$ 57,502
Expenditures:										
Administration	$ 6,528	$ 5,016	$ 11,544	$ 1,435	$ 269	$ 1,704	$ 7,963	$ 5,285	$ 13,248	$ 12,729
Property operating	24,062	8,980	33,042	5,910	1,934	7,844	29,972	10,914	40,886	39,622
Grants in lieu of taxes	6,397	2,997	9,394	1,038	517	1,555	7,435	3,514	10,949	9,789
Amortization and interest	13,933	16,642	30,575	3,004	2,747	5,751	16,937	19,389	36,326	36,456
Total	$ 50,920	$ 33,635	$ 84,555	$ 11,387	$ 5,467	$ 16,854	$ 62,307	$ 39,102	$ 101,409	$ 98,596
Operating Loss	$ 19,808	$ 18,436	$ 38,244	$ 2,442	$ 2,235	$ 4,677	$ 22,250	$ 20,671	$ 42,921	$ 41,094
Major Repairs									$ 7,893	$ 10,481

Source: Department of Family Services and Housing

Provincially owned high-rise apartment building located on Kennedy Street in Winnipeg.

Audit Purpose, Scope and Approach

The purpose of our audit was to answer the following questions:

1. Are housing projects adequately maintained and expenditures for major repairs made with due regard for economy?
2. Are housing projects occupied by eligible tenants?
3. Are eligible applicants placed in a timely and equitable manner?
4. Are vacancies kept to a minimum?
5. Are tenants charged the appropriate rental fee?
6. Are arrears balances kept to a minimum?
7. Does the Department adequately ensure that sponsor-managed housing projects are performing as expected?

For questions 1, 2, 5 and 7 the audit scope was limited to the Provincially owned public housing units under the Urban and Rural Program.

For question 3, 4 and 6 our audit scope encompassed the entire Provincially owned public housing portfolio.

For questions 2, 3, 4 and 6 we did not audit the completeness and accuracy of the performance information created by MHA or Departmental information systems. This information was used in our analysis of performance.

Our audit was substantially conducted between September 2000 and March 2001.

Our audit included examining available records and conducting interviews of staff of the Department, MHA and sponsor organizations.

Our examination was performed in accordance with value-for-money auditing standards recommended by the Canadian Institute of Chartered Accountants, and accordingly included such tests and other procedures as we considered necessary in the circumstances.

Key aspects of our audit approach are discussed below by audit question where warranted.

With respect to question 1, we visually inspected and developed overall condition ratings for a sample of 20 housing projects from the Urban and Rural Program. We selected 15 housing projects in which major repairs had been completed in the March 31, 2000 fiscal year. We chose this sampling methodology because we wanted to see the impact of recently completed major repairs on the overall condition of the properties inspected. We also selected five housing projects at random. We attempted to make our sample as diverse, regarding building type and location, as possible and reflective of the average ages of the housing stock. Overall our sample included 15 housing projects that were MHA-managed and five that were sponsor-managed. These projects included 2,096 individual housing units, as shown in Figure 4. While the sample is neither random nor statistically valid, the results of this work are useful as they pointed us to areas of potential performance successes and shortfalls.

We engaged a local firm of consulting engineers to assist us in inspecting the properties and in developing and assigning condition ratings.

FIGURE 4

Housing Project Sample

	Winnipeg		Rural		Total	
	Projects	Units	Projects	Units	Projects	Units
MHA-managed	10	1,369	5	215	15	1,584
Sponsor-managed	3	435	2	77	5	512
Total	13	1,804	7	292	20	2,096

With respect to question 3, we did not review the placement of applicants within sponsor-managed projects because we found that waiting lists only existed in a small number of projects.

For questions 2, 5, and 6, we selected a sample of 108 tenants (83 MHA, 25 sponsor) from the housing projects selected in question 1. We looked at a minimum of five tenants per housing project and ensured that both Employment Income Assistance (EIA) and rented-geared-to-income (RGI) tenants were selected.

For question 7 we limited our scope to the 34 sponsor-managed projects under the Urban and Rural Program.

Important Considerations

The Department, MHRC and MHA have been impacted by two significant events that happened in 1998 and 1999.

The Social Housing Agreement with the CMHC was signed in September 1998 and as a result, effective October 1, 1998, more than 16,500 housing units were transferred to the Department's portfolio. This transfer effectively doubled the number of units that the Province was responsible for. As a result, the Department needed to develop the organizational capacity to administer the transferred units.

One year later, shortly after the Provincial election, the Department of Family Services and the Department of Housing were amalgamated. Although such amalgamations are done to benefit client service, reduce duplication and delivery cost and time, they don't occur overnight. Such transitions provide a timely opportunity to evaluate past practices and procedures and identify changes and courses of action to follow.

Throughout the course of our audit, the Department was in transition. We observed changes to reporting relationships, policies and practices. During our interviews with staff, we found that many viewed these changes as opportunities to improve the way they were providing service to their clients. In conducting our visual inspections, we were struck by the very apparent desire of many of the front-line people we met to provide quality services and homes to the residents.

Subsequent Events

Our audit work was substantially completed by March 31, 2001. Management advised us of the following significant events that occurred near or after that date:

Maintenance

- Responsibility for maintenance of properties and for capital projects was consolidated in the Maintenance Branch (formerly a responsibility shared by the Winnipeg and rural district offices).
- For the Winnipeg District, two maintenance supervisor positions and two maintenance coordinator relief positions were created. Two maintenance supervisor positions were also created for the rural districts.

Property Management

- As a result of the above noted restructuring, the Winnipeg and rural district offices now focus on their property management responsibilities, including vacancy management, arrears collection and the quality assurance process undertaken by District Managers.
- For the Winnipeg district:
    - Two zones were created and an additional manager was appointed.
    - The number of property managers was doubled by increasing the responsibilities of the former assistants. Each property manager is now responsible for approximately 350 - 450 units rather than approximately 750.
    - Three "floating" positions were created (two property managers and one tenant relations officer) to provide assistance with issues in the various portfolios when needed.
    - Eight clerical positions were created. The new clerical positions have assumed many of the clerical responsibilities formerly performed by maintenance coordinators and property managers.
    - Four Winnipeg tenant relations officers were added to the former complement of seven by increasing the responsibilities of former tenant resource workers. Caseload per officer has decreased from approximately 1,000 to 700.
    - An Accounts Receivable Branch was created in May 2001 and staffed by six positions. Responsibilities of the Branch include developing repayment plans for tenants who owe the MHA rent from the current or a former tenancy, the processing of claims on former tenants with arrears, and all actions related to the Federal Refund Set-off Program.

Because of the timing of these events, we have not assessed their potential effect on issues raised or on recommendations made. The Department responses to some of our recommendations refer to the impact of these changes on the issues reported.

Provincially owned high-rise apartment building located on Selkirk Avenue in Winnipeg.

Audit Findings and Recommendations

1. ARE HOUSING PROJECTS ADEQUATELY MAINTAINED AND EXPENDITURES FOR MAJOR REPAIRS MADE WITH DUE REGARD FOR ECONOMY?

WHAT WE CONCLUDED

With respect to expenditures for major repairs, we concluded that MHA exercised appropriate regard for economy.

With respect to whether housing projects were adequately maintained, we concluded that the results of our sample of visual inspections, overall, spoke well of the efforts of the Department in maintaining housing projects to an appropriate level.

Major repairs are referred to by the MHA and the Department as "Modernization and Improvement".

We also concluded, however, that planning processes employed by MHA and the Department, including:

- performing property inspections,
- determining repair priorities,
- determining and monitoring the overall effectiveness of the its maintenance effort, and
- conducting preventive maintenance

were not sufficiently rigorous to:

- ensure that financial resources allocated to property maintenance would be effectively applied to projects to sustain or enhance current performance levels, and
- clearly and convincingly communicate the effectiveness with which allocated funds are expended and the impact of less than adequate funding levels.

To determine whether housing projects were adequately maintained, we conducted visual, non-intrusive, inspections of a sample of 15 MHA-managed and five sponsor-managed housing projects and assigned physical condition ratings. We attempted to make our sample as diverse, regarding building type and location, as possible. All properties in our sample were constructed between 1969 and 1977. We view these to be of similar age. We noted that much of the Department's housing stock was built within this timeline.

We must stress that the sample is not sufficiently large to be statistically valid. Because of this limitation, the overall results of our sample cannot be interpreted as being representative of the overall condition of the entire housing portfolio. Nonetheless, we believe the results of our sample are useful as they lead us to areas of potential performance successes and shortfalls. With this information we engaged MHA and Departmental officials in discussions regarding likely causal factors. Our visual inspection process is discussed in Figure 5.

In this report, "maintenance" refers to the activities aimed at ensuring the physical condition of public housing properties continuously reflect the quality of housing desired to be delivered by the Department. These activities include:

- **Major repairs**, such as new roofs and windows, upgrades and retrofits.
- **Corrective maintenance**, such as patching leaks in roofs and replacing weather stripping on doors and windows.
- **Preventive maintenance**, such as painting, inspecting roofs, caulking windows, changing filters and lubricating moving parts.

FIGURE 5

Our Visual Inspection Process

In conducting our visual inspections we used the "Protocols for Building Condition Assessment." This document was published by the National Research Council of Canada's Institute for Research in Construction, in collaboration with the Office of the Auditor General of Canada and the federal Department of Public Works. The Protocols are intended to improve the quality of technical audits of buildings and are directed towards building owners and managers in the public and private sectors.

We selected 15 housing projects (11 MHA and four sponsor) from the population of Urban and Rural Program housing projects in which major repairs had been completed in the March 31, 2000 fiscal year. We chose this sampling methodology because we wanted to see the impact of recently completed major repairs on the overall condition of the properties inspected. We also selected five housing projects at random (four MHA and one sponsor).

For each housing project we assessed the physical condition of the following five property/building components: site, structure, building envelope (roof, windows, walls, insulation), interiors and building systems. A condition rating scale of poor, fair, good and very good was utilized. Projects were then assigned an overall condition rating based on the component assessments. To ensure a consistent approach to overall condition assessments, a methodology was developed based on the frequency of assessment ratings for the five components. For example, to be assessed as good, a project needed at least three component scores of good and no component scores of poor. To be assessed as poor, a project had to be assigned at least two component scores of poor and no more than one component score of good. Projects with combined component scores not meeting these parameters were assessed as fair.

Slightly different condition rating descriptions were necessary for interiors because aesthetics is a significant factor. By interior we mean primarily bathroom and kitchen cabinetry and fixtures, walls, doors, flooring and window coverings. Windows themselves were considered part of the building envelope. A scale was needed to reflect a degree of wear but also aesthetic appeal. What was considered appealing décor in the 1970s is different from what is currently considered appealing. Our scale tried to capture the idea that kitchens could be functional and reasonably maintained but show moderate wear and be very outdated. As a result, such a kitchen would likely not be appealing or satisfactory to many existing or prospective tenants. An observed situation such as this would result in an assessment of "fair". We believe the idea of maintaining aesthetic appeal is consistent with the Department's general approach to public housing because we saw several examples of recent kitchen and bathroom upgrades that were of an appropriate quality for the nature of the units, and that significantly improved interior aesthetics.

Condition Rating Scale
(except for interiors)

Poor
Many elements near failure or failing.

Fair
Several elements showing significant signs of wear. or near failure

Good
Several elements showing moderate signs of wear.

Very Good
Few elements showing any signs of wear.

Condition Rating Scale
Interiors

Poor
Significant wear with some elements near failure or failing.

Fair
Moderate to significant wear but functional. Style not updated in 20 to 30 years.

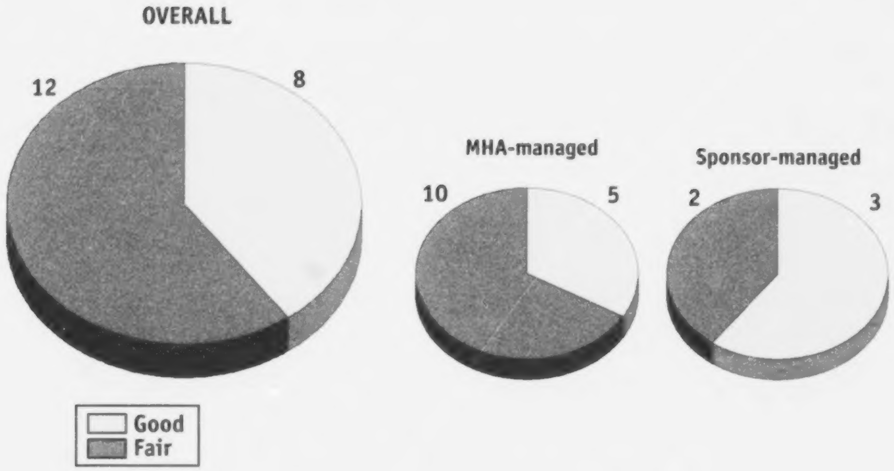
Good
Little to moderate wear but functional. Style updated in last 10 to 20 years.

Very Good
Functional with slight to no wear. Style updated in last 10 years.

For the 20 housing projects we visually inspected, eight projects (40%) were assessed as being in good condition and 12 projects (60%) were assessed as being in fair condition. No projects were judged to be in poor condition. These results are illustrated in Figure 6.

FIGURE 6

Condition Assessments Based On OAG Visual Inspections



As detailed in Figure 7, for MHA-managed projects, when broken down by building component, we found that 67% and 53% of projects scored good for structure and site, respectively. However, only 27% of projects scored good for building envelope and building systems, and only 20% were judged to have good interiors.

Specific comments regarding the reasons for fair to poor component assessments are as follows:

- *Site:* Common site problems included negative grade slope and uneven or deteriorated sidewalks, driveways and parking areas. As a result of improper grade, we observed on certain locations that rainwater drained into the basements. Rainwater could cause damage to the building as well as to a tenant's personal effects. Uneven or deteriorated sidewalks, driveways and parking areas can also result in rainwater entering the basement and can create a hazardous situation for tenants, in particular the elderly.
- *Structure:* The two projects with structures assessed as poor were due to serious exterior wall stress fractures occurring because of differential movement and thermal stress.
- *Building Envelope:* Common building envelope problems observed included poorly placed or settled insulation and inadequate insulation. Poor insulation practices are not energy efficient and have caused moisture damage and mould growth on ceilings and walls. Common problems with original sealed windows and single pane windows included air leakage, icing and condensation. These problems caused moisture

damage to drywall and window frames and in some cases started to deteriorate the wall structure. In addition, we saw evidence of leakage through roofs and walls at several projects due to poor installation of rooftop equipment, particularly communications equipment (cell phone and cable) and the associated supports and penetrations through roofing and exterior walls.

- *Interiors:* We noted problems with moisture damage, significant wear and outdated styles.
- *Building Systems:* a common problem was poor ventilation. This problem resulted in lower than desirable air quality, high humidity and mould development.

For Sponsor-managed projects, when broken down by components, 60% of projects scored good for structure, interiors and building systems, whereas 40% scored good for site and building envelope. The structure and building envelope components rated as poor, relate to one housing project where chronic water infiltration and moisture problems resulted in significant deterioration of numerous piles and of the exterior walls. We also observed that the roof and most of the windows were from the date of original construction and were now worn to the point of needing to be replaced.

For components assessed as fair, we observed similar problems as previously noted for MHA-managed projects.

As is the case with many performance measures, our visual condition assessments were based, in part, on subjective judgements of physical condition. In our view this is unavoidable. We minimized the risk of inappropriate subjective judgements by engaging a firm of respected and experienced engineers to conduct the inspections.

While it may seem best to have all projects assessed as good, such results may not be reflective of a cost-effective approach. In an effort to ensure all resources are utilized to the greatest extent possible, individual building components will, by necessity, be allowed to wear. The key is to prevent failure and secondary damage. As a result it is reasonable to expect a mix of housing projects in good and fair condition, as well as a variation, within a project, of building component ratings.

In our sample of 15 MHA projects, we noted a greater amount of fair assessments, whether calculated on the basis of housing projects or on the basis of the number of housing units (Figure 8). We did not attempt to determine what proportion of good to fair assessments would be reasonable or representative of a cost-effective approach, for the age and composition of the Manitoba housing stock. However, Management spoke of years of underfunding and of deferrals of major repairs as the likely cause for the greater number of projects in fair condition.

FIGURE 7

Results of OAG Inspections of 15 MHA and 5 Sponsor-managed Housing Projects

Project Identification Number	Winnipeg/ Rural	Building Type	Date Built	Condition Ratings					
				Site	Structure	Envelope	Interior	Systems	Overall
MHA-managed									
1	Winnipeg	HR	1970	G	G	G	F	F	**G**
4	Winnipeg	HR	1971	G	P	P	F	G	**F**
6	Winnipeg	HR	1971	F	G	P	F	F	**F**
10	Winnipeg	HR	1976	G	P	P	G/F	F	**F**
7	Winnipeg	HR/WF	1975	F	G	F	F	F	**F**
8	Winnipeg	MR	1975	G	G	G	F	F	**G**
2	Winnipeg	WF	1971	F	G	F	F	F	**F**
3	Winnipeg	WF	1971	F	F	F	G/P	F	**F**
5	Winnipeg	WF	1971	F	G	P	F	F	**F**
9	Winnipeg	WF	1975	F	G	F	F	P	**F**
15	Rural	MR	1977	G	G	G	F	G	**G**
11	Rural	WF	1969	G	G	F	F	G	**G**
12	Rural	WF	1970	G	F	F	F	F	**F**
13	Rural	WF	1971	F	F	F	G/F	F	**F**
14	Rural	WF	1976	G	G	G	F	G	**G**
Sponsor-managed									
16	Winnipeg	HR	1971	G	G	F	F	G	**G**
17	Winnipeg	MR	1972	F	G	G	VG/F	G	**G**
20	Rural	MR	1972	F	F	F	F	F	**F**
18	Winnipeg	WF	1973	G	P	P	VG/F	G	**F**
19	Rural	WF	1972	F	G	G	G/F	F	**G**

Summary of Results by Building Component

		Site	Structure	Envelope	Interior	Systems	Overall
MHA-managed Projects	Poor		2	4		1	
	Fair	7	3	7	12	10	
	Good	8	10	4	3 (Note 1)	4	
	Very Good						
Total number of projects		15	15	15	15	15	

Note 1: Certain units in each of these three projects had been renovated in the last 15 years. Renovated units were assessed as being in good condition. The other units were assessed as fair for two projects and poor for the other project.

		Site	Structure	Envelope	Interior	Systems	Overall
Sponsor-managed Projects	Poor		1	1			
	Fair	3	1	2	2	2	
	Good	2	3	2	1 (Note 2)	3	
	Very Good				2 (Note 2)		
Total number of projects		5	5	5	5	5	

Note 2: Certain units in each of these three projects had been renovated in the last 15 years. For two projects the renovated units were assessed as being in very good condition and for one project in good condition. The other units in each of these projects were assessed as being in fair condition.

Legend: HR (High-Rise); WF (Wood Frame); MR (Mid-Rise)
VG (Very Good); G (Good); F (Fair); P (Poor)

FIGURE 8

Proportion of Projects in Good and Fair Condition

	MHA-managed		Sponsor-managed		Total	
	#	%	#	%	#	%
Projects						
Total	15	100	5	100	20	100
Good condition	5	33	3	60	8	40
Fair condition	10	67	2	40	12	60
Related Housing Units (Note 1)						
Total	1,584	100	512	100	2,096	100
Good condition	406	26	381	75	787	38
Fair condition	1,178	74	131	25	1,309	62

Note 1: The condition ratings are reflective of the five units that we examined.

In 1997 the Department prepared a schedule of major repairs that it believed to be necessary over a 10 year horizon. The identified needs for 1998 equaled $22.0 million, for 1999 $14.5 million and for 2000 $15.0 million. In explaining the rationale for needed funding levels, in a document to Treasury Board, management at the time noted the following: *"Budgetary constraints have seriously limited the MHA's ability to complete regular maintenance of the aging housing stock as well as to respond to urgently required modernization and improvement. Urgent repairs often result in the deferral of preventative maintenance and upgrading the portfolio. Over the long run, deferred regular modernization and improvement results in a poorer condition of individual projects and more expensive repairs later on."* Actual funding levels were significantly below the identified need, as detailed in Figure 9.

FIGURE 9

Identified Need Versus Actual Funding
March 31
(in millions)

	1998	1999	2000	2001
Identified need	$ 22.0	$ 14.5	$ 15.0	$ 10.4
Actual funding	7.2	8.7	10.5	7.9
Variance	$ 14.8	$ 5.8	$ 4.5	$ 2.5

The impact of a sustained period of underfunding would be cumulative in effect and subsequently difficult to overcome without the infusion of significant additional funds. A direct consequence would be deteriorating unit conditions. We note that the 10 year major repair plan for the entire portfolio (MHA and sponsor-managed projects), which is updated on an annual basis, includes $10,000,000 in planned expenditures for each of the next 10 years. Management indicated that $10 million was the likely annual funding cap. As shown in Figure 9, this level of funding occurred only once between 1998 and 2001.

Management noted that reduced maintenance expenditures in the late 1990's were accomplished by limiting maintenance activities on a number of properties that, in 1997, had been identified for disposal. The decision to dispose of these properties was subsequently reversed, but Management noted that several years of neglect had taken their toll on these properties. Two of these properties were included in our sample and received overall ratings of Fair.

To illustrate, for one of the projects in our sample that had been identified for disposal, the replacement of all windows and doors had been scheduled for 1998 and included in the 1998 need of $22.0 million. As at March 31, 2001 this major repair had not yet been done. In conducting our visual inspection of that property we substantiated the critical need for the replacement of windows and doors. As a consequence of deferring this major repair, we noted that the windows and doors offered little thermal resistance and that secondary deterioration of other elements had occurred. We evaluated the building envelope for this project as being in poor condition.

The question we were left with was, "Can the Department sustain or enhance its current level of performance?" (i.e., achieving an appropriate ratio of housing projects in good and fair condition). The aging housing stock has and will continue to increasingly challenge the Department in effectively using its assigned resources.

We believe there are four major process related weaknesses that may jeopardize the Department's ability to sustain or enhance current performance levels, as follows:

1.1 the failure of MHA to conduct comprehensive inspections of housing projects to identify needed major repairs;
1.2 the lack of an appropriately rigorous process to prioritize needed major repairs;
1.3 the lack of performance information to assess the adequacy or effectiveness of the overall maintenance effort; and
1.4 the lack of a comprehensive preventive maintenance program.

We also observed deficiencies in two other decision-making tools, namely:

1.5 inadequately supported cost estimates for major repairs reflected in the 10 year plan; and
1.6 the lack of a complete record of the total maintenance effort.

We discuss each of these factors in the sections below.

In addition, to determine whether the recent major repairs on the projects we examined were conducted with due regard for economy we assessed the following criteria:

1.7 appropriate standards and specifications should be in place; and
1.8 competitive tendering practices should be in place.

WHAT WE FOUND

1.1 The Need For Comprehensive Inspections Of All Housing Projects At Regular Intervals

Effective inspections require that building components be examined in detail by qualified individuals and judgements made as to condition, remaining useful life and the need and timeframe for major repair work, as well as corrective and preventive maintenance. Standardized inspection guides or checklists are an invaluable tool for ensuring consistency in inspections conducted and in condition ratings assigned, in communicating results to pertinent staff and future inspectors, and in analyzing the longer-term performance of the building components.

MHA-managed

The main purpose of the **unit condition report** is to provide a means of comparing the unit condition before and after tenancy in case there is any damage done to the unit. This is especially important if a dispute about damage charges is brought before the Residential Tenancies Branch.

For MHA-managed projects, the maintenance co-ordinators for the 15 housing projects we inspected indicated that detailed inspections using standardized inspection guides or checklists were not conducted for any of their assigned properties. Rather, they periodically visited their assigned properties to maintain an awareness of the property's general condition. In addition, property managers indicated that rental unit condition reports would have been prepared when there was a change in tenants.

Maintenance Co-ordinators noted that major repair projects, as well as corrective maintenance work, for each of their assigned housing projects were identified based on the knowledge they acquired from their visits and from comments received from the property managers and building superintendents.

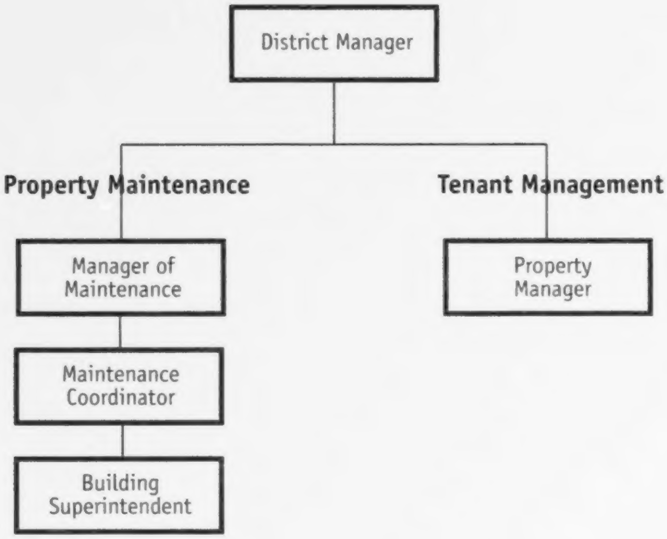
Maintenance Co-ordinators advised that corrective maintenance of components, i.e., fixing leaks and patching holes or replacing worn equipment components such as belts and electric motors, was conducted when needed. During our visual inspections of 20 properties (15 MHA and 5 sponsor-managed), nothing of significance came to our attention that would suggest that appropriate corrective maintenance activities were not occurring on known minor failures.

Preventive maintenance is discussed in section 1.4.

In this section of the report we focus on the identification of major repair projects.

FIGURE 10

Organization Chart
as at March 31, 2001



We did not assess whether officials responsible for housing projects were sufficiently qualified to identify the need for a major repair. Nevertheless, relying upon the unguided observation and analytical skills of these officials (however qualified they may be) to identify needed major repairs can result in significant variances between projects in the quality and completeness of identified needed major repairs. Eventually, property condition can be negatively impacted. We believe that the results of our visual inspections, as discussed below, demonstrate that significant variances have occurred between projects, in the quality and completeness of identified needed major repairs. We believe these findings support the value of conducting and documenting detailed inspections.

As part of our visual inspection process, we identified needed major repairs, estimated the cost of these repairs and compared these repair projects to those identified in the 10 year major repair plans for each project.

We found that the 10 year major repair plans for each of the 20 projects we inspected did not include major repairs that should not be undertaken.

However, we identified $4.2 million in needed major repairs that had not been identified by MHA or the Department. In this report, we refer to the results of this work as "OAG identified additional major repairs". A summary of these audit findings by building component is presented in Figure 11.

FIGURE 11

Estimated Cost of OAG Identified Additional Major Repairs by Building Component

	Site	Structure	Building Envelope	Interior	Building Systems	Total
MHA-managed	$ 9,500	$ 505,000	$ 759,000	$ 1,746,500	$ 808,250	$ 3,828,250
Sponsor-managed	-	40,000	173,000	4,500	167,650	385,150
Total	$ 9,500	$ 545,000	$ 932,000	$ 1,751,000	$ 975,900	$ 4,213,400

Because of the inherent limitations of visual inspections, in certain instances, the visible condition of components did not result in enough information upon which to determine whether a repair was needed, but raised a concern nonetheless. For MHA-managed projects, 17 such instances were identified. For sponsor-managed projects, 10 such instances were identified.

The additional needed major repairs that we identified for each of the projects in our sample, are repairs that we believe are necessary over the next 10 years to elevate the projects' condition ratings to good, or to maintain their current good rating. In practical terms we understand that the MHA may allow a good project to slip into fair condition and selectively determine which fair projects to elevate to good. As such, the timing and priority of our identified needed major repairs may ultimately differ from that which the MHA would make in full light of the maintenance requirements for the entire portfolio. What we are suggesting is that these decisions be made by the MHA with better information on all needed major repairs than is currently available in the 10 year major repair plans.

Windows that need replacing can cause frost, condensation and mould.

Excessively worn flooring is unsightly and contributes to sub-floor damage.

Because interiors are a unique challenge, we believe it valuable to discuss the planning of interiors separately from the major repairs of the other property components.

Approximately $1.7 million (40%) of the estimated cost of OAG identified additional repairs relate to interiors. It is important to note that the vast majority of these items relate to renovation, that is the replacement of a functional but significantly worn or outdated element, for example, kitchen cabinets, flooring, toilets, and tub surrounds. While many of these repairs impact quality of life (a soft benefit) rather than being a replacement of a broken item, some stakeholders may question the value of such repairs, reasoning that the units are functional as they are. However, in identifying additional needed repairs, we considered the issue of equity (or consistency) between housing projects. In examining the 10 year plans for our selected housing projects, we noted that comprehensive interior upgrades had been identified for five projects but only partially for seven and not at all for three projects, even though all projects were built between 1969 and 1975. We also noted that interior upgrades had been conducted in some units in three of the projects examined. Our identified needed repairs reflect what we believe would be a more consistent approach to the upgrade of unit interiors.

With respect to the other building components combined, we determined that the MHA had appropriately identified needed major repairs for eight of 15 (53%) projects inspected (bearing in mind the limitations of visual inspections and the areas identified as needing more detailed, and likely intrusive, inspection). However, in our view, the potential for inadequate results is high. For the other seven projects in our sample, we identified a significant number of major repairs that were not reflected in the 10 year major repair plans prepared for the projects. We believe that the needed repairs detected by our inspections indicate the importance of having more rigorous processes for identifying major repairs.

Example of a recently upgraded kitchen.

Example of a recently upgraded washroom.

Sponsor-managed

For sponsor-managed projects, we found that the Department had developed a reasonably detailed inspection form. For the five projects we examined, inspections were conducted by the Department in 1999 and documented on the inspection forms. Management advised that inspections are scheduled on a three year cycle. The results of the 1999 inspections were reflected in the 10 year plans for each housing project. We believe that the findings from our visual inspection process, as discussed earlier, supports the value of conducting and documenting detailed inspections.

With respect to interior upgrades, we determined that the Department had appropriately identified needed major repairs for all of the five projects we inspected.

With respect to the other building components combined, we determined that the Department had appropriately identified needed major repairs for four of the five (80%) projects we inspected.

We believe the more rigorous process for inspections was a significant contributing factor in identifying and planning for the needed repairs.

R1 We recommend that MHA perform inspections of all housing projects using appropriately detailed standardized inspection guides, and that these inspections be conducted at regular intervals of 2 to 3 years.

COMMENTS OF OFFICIALS

The Audit Report presents a point-in-time picture of the organization during a very dynamic time. During the period of time that framed the audit, September 2000 through March 2001, the organization was undergoing, and continues to undergo, significant change. Many of these changes were in process at the time of the report, and reflect recommendations contained in the Audit Report.

Considerations for the restructuring of the organization and operations of the MHA began in late 1999. One of the significant changes made was to consolidate responsibility for the life cycle of buildings (i.e., routine repairs and maintenance through to capital repairs) across the Province, and to enhance both the capital planning process and the staff resources to maintain buildings. In 2002, a rigorous annual inspection process was introduced for the entire MHA portfolio. These inspections involve inter-disciplinary staff teams, comprised of experts trained in building envelope, electrical systems, mechanical engineering, and other disciplines. In addition, the format utilized for sponsor-managed projects for documenting these inspections has been adopted and put into service by MHA staff. Also in 2002, a 5-year capital plan has been adopted to replace the 10-year capital plan, increasing the focus on capital repairs required in the near term.

The former 10-year capital planning process scheduled important building components to be replaced or upgraded over a 10-year period. The plan was updated annually, with primary emphasis being placed on years 1 and 2. The audit report notes that during their visual inspection process, the contract engineers identified repairs that had not been included in the 10-year plan, and repairs that could have been accelerated. Management believes that these repairs would have been identified and (re)prioritized during the annual reviews of the 10-year plan at the appropriate time. These additional repairs were identified during the inspections that were conducted in 2002 by the inter-disciplinary teams.

The Maintenance Management System (MMS) was deployed only months before the audit was undertaken. The ongoing development of this system has enhanced the ability of the MHA to track building components and warranties. The deployment of phase 2 of the MMS will see enhanced capabilities that will allow for the capital planning process to be systematically monitored.

The Audit Report notes that the sample size of 20 buildings was not sufficiently large to be statistically valid. Management feels that this sample is not representative of the entire portfolio. Management suggests that undertaking a comparison between the MHA and private sector *buildings of a similar age may have provided a useful benchmark in the audit process. This comparison was not undertaken.*

R2 We recommend that MHA act on the results of the visual inspections conducted by our Office.

COMMENTS OF OFFICIALS

Management advises that the inspection reports have been distributed to staff, and items considered immediate have been acted upon. Items that were not considered to be required immediately have been adopted in the capital improvement plans.

1.2 The Need To Better Prioritize Identified Major Repairs

Because all public sector organizations must carry out their responsibilities within a limited or defined budget, the ability to prioritize between competing demands is essential. Understanding what is critical and what can be delayed or abandoned, and still continue delivering acceptable performance levels, is an important part of an organization's management processes.

We were advised that the Department and the MHA prioritize identified major repairs using the following classifications:

(i) life safety,

(ii) structural integrity,

(iii) legislative requirements,

(iv) building functionality, and

(v) cost-effective measures.

We are concerned about three aspects of MHA and the Department's prioritization process:

1.2.1 an initial allocation based on units rather than need,
1.2.2 the lack of an adequate process to prioritize major repairs dealing with building functionality, category (iv), and
1.2.3 the inconsistent use of average life expectancies for building elements.

1.2.1 Initial allocation of funds should be based on prioritized needs

On an annual basis, available funds are initially allocated to the MHA-managed and sponsor-managed portfolios based on the number of housing units. The relative importance of identified repair projects does not influence the initial allocation. We were advised that subsequent to this initial allocation, funds are redistributed among projects in response to prioritized needs.

Initially allocating resources based on the number of units rather than on prioritized needs, while administratively expedient and, on the surface, equitable, may unduly influence the final allocation decision, and as such would not ensure that the best use is made of available funds.

1.2.2 A more robust process for prioritizing major repairs dealing with building functionality should be in place

Once the initial allocation is made, repairs identified as either category (i), (ii) or (iii) are scheduled in the first year of the 10 year plans for the MHA and for the sponsor-managed portfolios. Officials advised that there are relatively few of these types of repairs and that the bulk of identified repairs are considered category (iv), that is, dealing with building functionality. Category (iv) repairs determined to be of higher priority are scheduled in year 1 until funds are exhausted (in 2000/01 total available funds were approximately $10,000,000). The remaining category (iv) repairs are scheduled in years 2 to 10 in the respective 10 year plans.

We found, however, that a defined process with objective criteria was not in place to prioritize category (iv) repairs, either by housing project or Province-wide. Officials advised that the availability of funds and the professional opinions of staff involved in managing the housing projects factored heavily in prioritizing the category (iv) repairs. However, we found no documented evaluations to support the decisions made regarding the relative importance of competing repairs. Documentation of the prioritization process was limited to the actual 10 year plan and, for sponsor-managed projects, a memo attached to the plan explaining the nature of certain of the repairs scheduled in year one.

With respect to the scheduling of MHA identified major repairs, we found four major repair projects (three involving windows) in the fifteen 10 year plans that we examined, that in our view were not scheduled soon enough. Total estimated value of these repairs equaled $833,000. As shown in Figure 12, these repairs should be accelerated by a range of one to four years. Failure to accelerate the repairs could result in secondary damages and client dissatisfaction.

FIGURE 12

MHA Identified Repairs That Should Be Accelerated

Project Identification Number	Repair Type	Accelerate By	$ Value
3	Windows	2 years	100,000
4	Gable end cracks	2 years	10,000
4	Windows	4 years	223,000
5	Windows	1-2 years	500,000
		Total	833,000

In our view, the prioritization process was not sufficiently robust to ensure the appropriateness of the scheduling decisions made. Further, the prioritization/scheduling process did not readily allow the Department and the MHA to communicate the extent to which major repairs were being unreasonably delayed because of funding constraints and the associated risks.

Other useful information to include in the 10 year major repair plans

To increase the usefulness of the 10 year major repair plans, we believe that individual project plans should reflect, in the most appropriate year, the major repairs identified as necessary from a comprehensive inspection process, regardless of the Department's ability to fund in that particular year. Future iterations of the 10 year plans should identify the major repair projects that were scheduled in the most recently completed year but not undertaken. This process would ensure that the Department had information available on the estimated cost and nature of major repairs deferred because of the funding cap and would likely be useful information in determining future repair priorities.

R3 We recommend that an appropriately detailed process be developed to rank repairs as to their relative importance and that these rankings be used to allocate available funds.

COMMENTS OF OFFICIALS

The MHA was in a period of transition during the audit. In the former 10-year capital plan process, budget dollars were initially allocated to districts based on the number of housing units in that district. District management, in conjunction with Head Office, prioritized capital projects within the district. However, capital funds would be often be shifted from one district to another during the year, as required, based on the relative priority/urgency of capital projects. The allocation of budget dollars to districts based on the number of units was a notional allocation, and was never considered inflexible.

In 2002, in addition to having implemented an inspection process, the MHA has deployed a new 5-year capital plan. The new 5-Year Plan no longer makes a preliminary allocation of budget funding by district. As part of developing the new 5-Year Plan, a more detailed process for ranking capital projects according to Province-wide priorities is being developed.

Management notes, however, the inherent difficulty in determining priorities on a Province-wide basis. For example, it is difficult to rank the relative priority of one roof repair over another. Management notes that senior management must often make decisions for category (iv) repairs on a project-by-project basis, based on available funds.

R4 We recommend that all needed major repairs be scheduled in the 10 year major repair plans for each project, and that the plan track the deferral of any needed major repairs.

COMMENTS OF OFFICIALS

The MHA was in a period of transition during the audit. A key change that was occurring was the development of a 5-Year Plan to replace the 10-Year Plan. The new 5-Year Planning process will track the deferral of major needed repairs.

R5 We recommend that the Department annually advise Treasury Board of:

- **the estimated level of expenditures needed for each of the next 10 years to achieve an appropriate balance of housing stock in good and fair condition; and**
- **the major repairs that have been deferred because of limited funding and the project specific risks associated with deferring the major repairs.**

COMMENTS OF OFFICIALS

Management agrees and will appropriately advise Treasury Board on an annual basis regarding the 5-Year Plan.

1.2.3 Average Life Expectancies Of Building Elements Should Influence Priorities

It is safe to assume that all equipment and building elements will fail after a period of time. However, life expectancies can vary significantly depending on the nature of the item, the quality selected and the preventive maintenance performed. Understanding when equipment or building elements are likely to fail contributes to the development of longer term plans that reflect appropriate major repair priorities, and can help minimize property life-cycle costs.

For MHA-managed projects, we found that MHA had not defined the life expectancies for the elements of a building. MHA officials advised that most industry developed life expectancy lists indicate element lives that are too short. As a result, they advised that if these life expectancies were used as a basis for planning and cost decisions, elements would be replaced before necessary and the funds required would be much greater than are available. In our view such listings could be adapted by the MHA to reflect the actual performance of the Manitoba housing stock.

For sponsor-managed projects, we found that the Department had defined the life expectancies for various elements of a building. In our view, there may be an opportunity to share this information with the MHA.

Because of the limited documentation supporting 10 year plans, we were unable to determine the extent to which life expectancies influenced the development of the 10 year major repair plans for the sponsor-managed projects.

R6 We recommend that the MHA develop life expectancies for key building elements and that the MHA and the Department work cooperatively to develop a consistent approach for using life expectancies of building elements in establishing priorities.

COMMENTS OF OFFICIALS

MHA agrees that life expectancies are a useful guide in long-term planning, and as a result has begun developing realistic life expectancies. Management advises, however, that projected life expectancies should be used only as a rough guide in prioritization, and not as a decision making tool, with actual replacements being made on an as required basis.

1.3 The Need for Performance Indicators On The Adequacy Of The Overall Maintenance Effort

In order to determine whether housing projects were adequately maintained, we first sought internal information on the physical condition of housing projects. However, the Department or MHA have not identified indicators of the adequacy of their maintenance program. In our view, indicators of the maintenance effort would likely include physical condition ratings.

> **R7 We recommend that the Department develop indicators of the adequacy of the maintenance program, gather and analyze the requisite information, and develop and act on strategies to improve performance.**
>
> ***COMMENTS OF OFFICIALS***
>
> *During the audit, the MHA was in a period of transition. Prior to the audit, management developed strategies to improve the performance of the maintenance effort. Changes include restructuring the maintenance function and the introduction of a cross-disciplinary inspection process that will be undertaken on an annual basis. In addition, the introduction of the MMS system will allow management to closely monitor the maintenance program. Management feels that the performance of the maintenance effort has improved dramatically and will continue to do so. Efforts to demonstrate the adequacy of the maintenance effort will be strengthened.*

Provincially owned townhouses located in Winnipeg with recently completed exterior retrofits.

1.4 The Need For A More Structured And Documented Preventive Maintenance Program

Preventive maintenance involves periodically servicing components in accordance with the manufacturer's recommendations and/or good industry practice. The intent is to keep each building component in good running order so that:

- the life of building components can be prolonged,
- buildings can function as they were intended,
- equipment can operate at peak efficiency,
- energy consumption can be minimized,

- disruptions to tenants caused by system failure can be avoided, and
- a safe and healthy environment can be sustained (i.e., maintaining air quality).

Examples of preventive maintenance work include painting, inspecting roofs, caulking windows, changing filters and lubricating moving parts. Preventive maintenance should be planned in conjunction with major repairs in the long and short-term and is essential if lifetime costs are to be minimized.

MHA officials responsible for coordinating the maintenance of the 15 MHA-managed housing projects we inspected identified the following activities as constituting preventive maintenance:

- site visits by maintenance coordinators;
- the day by day maintenance work conducted by building superintendents;
- for Winnipeg based properties:
    - inspection and service contracts for fire safety equipment, elevators and furnaces, as well as contracts for sewer cleaning (we observed that such contracts were in place); and
- for rural districts:
    - a central inspection and service contract for fire alarms (we observed that such a contract was in place);
    - district wide inspection and service contracts for elevators.

We acknowledge the value of the above-noted activities. However, as noted by the maintenance coordinators responsible for the 15 MHA-managed housing properties we inspected, comprehensive preventive maintenance programs that include documented work checklists by building component and task schedules were not in place for any of the housing projects in their respective portfolios (comprising much of the MHA's housing portfolio). As a result, the MHA cannot be assured that a consistent and complete approach to the conduct of preventive maintenance work is occurring throughout its housing portfolio.

With respect to sponsor-managed projects, while we did inquire as to the conduct of preventive maintenance, we noted that the MHA's guidebook to sponsors promotes the value of scheduled preventive maintenance.

Preventive maintenance programs would encompass fire safety equipment. Because fire safety is critical to all tenants, in section 1.4.1 we comment on the existence and quality of fire safety plans.

R8 We recommend that the MHA implement a more structured and documented preventive maintenance program. Such a program should include checklists of preventive maintenance tasks by building component and schedules for each task.

COMMENTS OF OFFICIALS

MHA recognized the need to consolidate capital improvement responsibility with other maintenance functions. With respect to the preventive maintenance program, the recent reorganization of the Maintenance

Branch presented further opportunities to expand on this, in the form of Service Standing Agreements. In addition, the creation of four District Maintenance Supervisor positions ensured the development of a preventive maintenance program as recommended in the report. The development and implementation of a comprehensive preventive maintenance plan is currently underway.

1.4.1 Fire Safety Plans Should Be Updated

With respect to multiple floor structures, two requirements of the Manitoba Fire Code are the inspection of fire safety equipment at regular intervals, and the preparation of fire safety plans. The Manitoba Fire Code defines a number of components for an effective fire safety plan including emergency procedures, instructions to and training for supervisory staff, building diagrams, and fire drills. Fire safety plans should be reviewed annually to ensure they take into account changes in use or other characteristics of the building.

We were advised that in 1992 and 1993, MHA and sponsor groups had prepared detailed fire safety plans for their multiple floor structures. In our sample of 20 housing projects, 14 (nine MHA and five sponsor-managed) were multiple floor structures that required a fire safety plan. In our interviews with MHA and sponsor group staff, we noted that many did not have an adequate understanding of what was required in a fire safety plan. We found that the existence or quality of fire safety plans varied considerably as follows:

- Only two projects (sponsor-managed) were able to provide us with current comprehensive fire safety plans. One of these plans had been reviewed in December 2000 by the City of Winnipeg's Fire Paramedic Services for compliance to the requirements of the Manitoba Fire Code and found to be satisfactory,
- Two projects (MHA-managed) were unable to provide us with a fire safety plan.
- Six projects (five MHA-managed, one sponsor-managed) provided us with the fire safety plans that were prepared in 1992 and 1993. While most plans contained a number of the key components, such as inventory of the fire safety equipment, floor plans, and instructions to occupants, they commonly did not contain detailed information on staff responsibilities, operation of the equipment or fire drill procedures.
- For four housing projects (two MHA and two sponsor-managed) fire safety plans were limited to either floor plans, instructions to tenants or, where applicable, the results of inspections by local fire officials.

The Manitoba Fire Code stresses that "a fire safety plan is of little value if it is not reviewed periodically so that all supervisory staff remain familiar with their responsibilities.

R9 We recommend that the MHA and the Department obtain, from housing projects with multiple floor structures, annual confirmations that comprehensive fire safety plans have been prepared or updated.

COMMENTS OF OFFICIALS

Since the late 1980's, the MHA has gone through 3 major City of Winnipeg Fire Code By-law upgrades. In each case, the MHA was a leader in ensuring compliance, and was instrumental in effecting changes to proposed By-laws which were beneficial from both a safety and financial *perspective. In addition, the MHA meets or exceeds provincial and municipal fire code requirements throughout the Province. Further, it should be noted that the MHA is rigorous with respect to ensuring the ongoing, safe operation of all fire equipment (residential smoke detectors, building fire alarms) through systematic testing undertaken by qualified fire safety personnel.*

Staff are in the process of obtaining annual confirmations of fire plan updating and completion. In addition to multiple floor projects, staff are ensuring that all other projects requiring fire safety plans are included in the annual confirmation process.

With respect to sponsor-managed projects, the Department will ensure sponsor managers of multiple floor buildings are aware of their responsibility to annually review and update fire safety plans. Sponsor-managed projects will be provided with appropriate resources to ensure that appropriate plans are in place. Copies of all sponsor-managed fire safety plans and updates will be retained by the Department along with confirmation of the annual review.

R10 We recommend that, on cyclical basis, a sample of fire safety plans be assessed for adequacy.

COMMENTS OF OFFICIALS

An internal audit process for determining the adequacy of existing plans has been initiated with annual reviews conducted and recorded.

R11 We recommend that staff responsible for fire safety be advised of their responsibilities and provided with appropriate training.

COMMENTS OF OFFICIALS

The MHA has created a Security/Loss Prevention Co-ordinator position that will further strengthen the MHA's ability to be proactive in the field of security and fire safety. As part of the auditing and updating of the fire safety plans, staff will continue to be advised of their responsibilities, and training is or will be provided as required. It is also anticipated that the MHA will soon begin a series of meeting with tenant groups to discuss the resident's role in fire safety and prevention.

1.5 The Need To Substantiate Cost Estimates With Supporting Documentation

Reasonable cost estimates are essential in ensuring a sound basis for major repair planning decisions. Requiring that the bases and logic for cost estimates be appropriately documented helps to ensure the validity of submitted estimates by allowing the bases and logic to be challenged.

For the 20 housing projects that we examined, we found very little documentation on how the cost estimates in the 10 year major repair plans were developed. With a few exceptions, there was just a total dollar amount for each repair identified. While we did not attempt to assess the reasonableness of the cost estimates included in the 10 year plans, our general reviews of the plans identified six instances where we believe costs were either significantly understated or overstated. An example of a significant overstatement was an MHA estimate in the 2001/02 major repair plan for $503,000 to replace all the windows in a particular housing project. In the 2002/03 major repair plan, the cost to replace these windows was estimated at $220,000. While we believe that the latter estimate is more reasonable, we were unable to determine the basis for the earlier estimate.

In another project, a 1997 consultant's report estimated the cost for exterior wall repairs to a property, excluding windows, to be $460,000. In the 2002/03 major repair plan, the cost for the building envelope retrofit was estimated at $175,000. Because of the lack of documentation we were unable to determine the reasonableness of the revised estimate.

R12 We recommend that MHA and the Department develop appropriate documentation standards for the 10-year major repair plans. These standards should include documenting:

- **the bases and logic for determining cost estimates; and**
- **the rationale for an item's relative priority, including the impact of the item's estimated life expectancy on the priority decision.**

COMMENTS OF OFFICIALS

As noted previously, significant changes have been introduced into the capital planning process, including the adoption of a 5-year plan. The introduction of documentation standards as recommended in the report has been introduced and the plan development team has been restructured to utilize cross-disciplinary teams of technical staff with appropriate skills for each required discipline. Finally, it is important to note that when the time comes for the capital repair, normal tendering processes are followed and assured prices are received.

Provincially owned single family residence located in Winnipeg.

1.6 The Need To Develop A Database Of The Total Maintenance Program

Because a component's expected life can be impacted by the adequacy of the total maintenance effort (major repairs, corrective maintenance and preventive maintenance), historical records of the maintenance effort are useful in anticipating and planning for future maintenance work.

With respect to MHA-managed projects, we found that, starting in April 2000, MHA's Maintenance Management System (MMS) recorded preventive and corrective maintenance conducted that required a purchase order (purchase order number, amount and description of the work). Purchase order and payment information was recorded by housing project, building and unit. However, the MMS did not record other preventive or correction maintenance conducted (i.e., routine greasing or filter changes), nor did it record major repairs conducted. With respect to major repairs we noted that the accounting records maintained by the Department were not readily accessible by maintenance coordinators or other pertinent staff nor were they sufficiently detailed to facilitate an appropriate analysis of the total maintenance effort.

In section 1.9.3 we discuss the MHA's information system on appliances and other electronic equipment.

With respect to sponsor-managed projects, a complete maintenance record was also not in place.

R13 We recommend that MHA and the Department develop a database of the complete maintenance effort.

COMMENTS OF OFFICIALS

The audit was conducted during the early stages of the deployment of MMS. Once fully implemented, MMS will provide a comprehensive database of the maintenance effort on a go-forward basis. The first phase of the MMS system has now been fully introduced and is used by all MHA maintenance staff to organize, execute and track non-capital maintenance efforts that result in the expenditure of funds. Capital maintenance efforts (i.e., major repairs) are tracked separately. Development of Phase 2 of MMS will be required to fully implement the recommendation for a comprehensive database, including all preventive and corrective maintenance efforts and major repairs. Planning is currently underway for Phase 2.

1.7 Appropriate Standards And Specifications Were Used For Major Repairs

MHA standards and specifications have been adapted from the National Master Specifications issued by the Construction Specifications Institute of Canada and have been adequately communicated to individuals responsible for the rehabilitation and maintenance of projects. 15 of the 20 projects we examined (11 MHA-managed and four sponsor-managed) included major repair work during the fiscal year ended March 31, 2000. We found that key standards and specifications used for the work were compatible in all significant respects with MHA standards and specifications.

We also found that the type and cost of work done was compatible with what would be reasonably expected in industry for properties of similar age and use. For three housing projects however, MHA standards and specifications did not exist for certain elements of the work because the requirements were unique to these projects and therefore did not warrant the development of general standards. For these situations we noted that the standards and specifications used followed appropriate industry practice for the age and use of the property.

1.8 Appropriate Competitive Tendering And Contracting Procedures Were Used For Major Repairs

We examined 14 housing projects, ten MHA-managed and four sponsor-managed, where major repair work had been done during the fiscal year ended March 31, 2000 and where tendering procedures were considered necessary. We note that MHA manages the tendering and contracting processes for all Provincially owned housing projects. We examined the tenders, the contracts and related documents for all the work done on these projects. We found that MHA followed appropriate competitive tendering and contracting procedures.

With respect to the tendering process, we found:

- Public tenders (newspaper advertisements), invitations to tender and telephone quotes were used where appropriate;
- Detailed tender specifications were prepared where appropriate;
- A log was used to record bidder information, all tender addenda, when tender documents were picked up or when and how they were delivered, and when bids were received;
- Sealed bids were used where appropriate;
- The tender closing date was enforced;
- Public tender openings were done;
- Two staff opened and recorded all bids;
- An evaluation of the bids was done; and
- The bid selected was usually the lowest bid received without sacrificing quality and service.

With respect to contract management, we found:

- The contract agreed to the successful bid and was signed by all parties;
- Change orders were approved by Maintenance Chiefs on the basis of the consulting architect or engineer giving their assurance that the change was necessary;
- MHA's Contract Administrator certified that services were performed or goods received and the Maintenance Chiefs authorized payments on progress billings only upon certification by a consulting architect or engineer that the work was done according to the specifications required under the contract and to the extent specified in the progress billing;

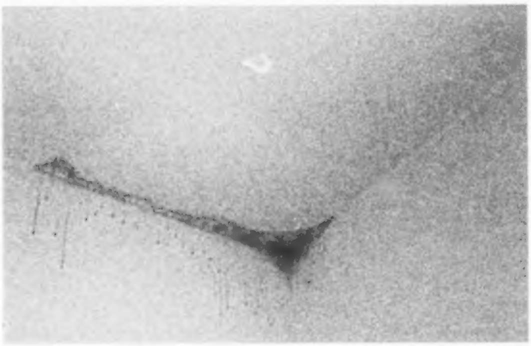
- A 7.5% holdback was withheld where appropriate;
- The consulting architect or engineer provided a Certificate of Substantial Completion; and
- The holdback was released when the Certificate of Substantial Completion was provided.

1.9 Other Items

In conducting our audit we became aware of certain actions which we believe indicate that the Department would benefit from better information and coordination of certain elements of its maintenance operations.

1.9.1 Holistic approach

We saw examples of the need to approach the maintenance of individual housing projects more holistically rather than identifying individual solutions to individual problems. We noted instances where windows were replaced to eliminate drafts, and in doing so, created new problems with respect to air quality. Another problem that occurred was that the installation of better sealed windows put additional pressure on the rest of the building envelope to dissipate the moisture within the building. Excessive moisture can result in condensation problems that can lead to water damage on sills and walls, as well as provide an environment for mould growth. While unsightly, mould can also give rise to health related problems for tenants.



Moisture related damage and mould at ceiling can be caused by poor ventilation and/or insulation.

1.9.2 "As Built" drawings

In the 20 projects we examined, "as built" drawings were not available on site. These drawings depict the building and its various systems as they were originally constructed.

As a result, maintenance personnel have had to develop their knowledge of the building's systems (mechanical, electrical, plumbing, elevators, fire and life safety etc.) without being able to refer to important system documentation. Learning about systems in this manner can be a difficult and time consuming task.

1.9.3 Appliance replacements

An appliance inventory and replacement plan would include:

- information on the appliances and warrantees, as well as purchase, repair and maintenance dates;
- suppliers and service providers utilized; and
- priorities for replacement, with cost estimates.

This information is important as it would facilitate the development of annual and longer-term budgets, the comparison of appliance costs between projects and suppliers and the monitoring of product reliability.

For MHA-managed projects, we found that during the fiscal year 1999, MHA staff created a database of appliances and other electrical equipment on the MMS. The database recorded equipment type, serial number, location, warrantee information and life expectancy. However, we observed that the database had not been updated for transactions since the initial inputting of the appliance and other electrical equipment inventory.

For sponsor-managed projects we determined that the Department did not maintain a centralized inventory and replacement plan for major appliances. We were advised that annual replacement cost estimates were based on building age and size and input from property managers and the Department's technical staff.

R14 We recommend that the Department and MHA develop centralized appliance inventories and replacement plans for their respective portfolios of housing projects.

COMMENTS OF OFFICIALS

During the audit period, the MMS was not yet fully in operation across the Province. However, centralized appliance inventories and replacement plans are now kept in the MMS. Some data entry remains to be done and remains a work in progress.

The Department has implemented annual reporting by sponsor-managed projects on the aging of appliances and projected replacement plans. This information along with the client type and replacement history is used to develop and allocate the appliance replacement budget.

Provincially owned high-rise apartment building in Neepawa.

2. ARE HOUSING PROJECTS OCCUPIED BY ELIGIBLE TENANTS?

WHAT WE CONCLUDED

For our sample of 108 tenants files, we concluded that the tenants were appropriately assessed against six of the seven eligibility criteria. Because of the lack of documentation, we could not determine whether applicants' were appropriately assessed against the criterion dealing with behavioral suitability.

We reached this conclusion by examining the following criteria:

2.1 eligibility criteria should be clearly defined, communicated and reviewed periodically for continued relevance,
2.2 tenants should meet the eligibility criteria, and
2.3 tenants should be housed in units that best meet their needs.

To assess these criteria we reviewed a sample of 83 tenant applications from 15 MHA-managed housing projects and 25 tenants from five sponsor-managed housing projects. As at March 31, 2000, these MHA-managed housing projects included a total of 1,584 units and the sponsor-managed projects a total of 512. We examined tenant files, reviewed policies and guidelines, and discussed the application and approval processes with MHA and sponsor officials.

With respect to our discussion in section 2.3, we did not audit the accuracy or completeness of the occupancy information recorded in the tenant management system.

WHAT WE FOUND

2.1 Eligibility Criteria Clearly Defined And Communicated

Clearly defined eligibility criteria and supporting guidelines help ensure that parties who are responsible for assessing the eligibility of applicants interpret the criteria in a consistent manner. Supporting guidelines are also a good teaching tool for new staff.

The systematic periodic review of an organization's policies, procedures and guidelines is also important because these reviews ensure the documents remain up to date and relevant.

MHA has developed a comprehensive, six module, Operating Manual that is also used by all sponsor groups. The module entitled *Applications and Tenanting* defines the eligibility criteria and provides guidance on how the eligibility criteria should be interpreted. We found, however, that while the Manual was introduced in June 1993 the last formal revision incorporated into the Manual was dated June 27, 1996. Of concern was that individual policies and guidelines had been issued by way of memo since that date but had not been incorporated into the Manual, including a recent revision removing an eligibility criterion.

MHA management advised that they had initiated the review of a number of policies and procedures. A Policy Review Committee was established with staff from MHA and the Department. The committee had begun reviewing, as its first priority, areas identified by senior management. These areas included: arrears, collection, eviction; definition of income; and tenant placement priority system. We noted that formal terms of reference

The **Application form** requires comprehensive disclosure by the applicant and family members of the following information: household names, address, employer information, income, assets, disabilities and health problems, credit history, as well as certified copies of income tax returns for household members.

had not been developed. Terms of reference promote clarity as they define the purpose of committees, the scope of activities, length of existence, reporting relationships, processes for identifying priority areas, approval processes and other important operating parameters. We encourage the Department to develop formal terms of reference for this important committee.

2.2 The Need To Document All Aspects Of Eligibility Assessments

To ensure public housing units are only occupied by eligible tenants, a demanding assessment against the eligibility criteria is essential. Such an assessment process should include:

- a standard application form that is appropriately completed for all applicants,
- assessments of eligibility that are documented, and
- communication of assessment results to applicants in a timely manner.

A rigorous process is important because it helps to ensure that all applicants are evaluated on a consistent and equitable basis.

FIGURE 13

Eligibility Criteria

1. Be a permanent resident of Canada.
2. Meet Manitoba residency requirements.
3. Be at least 18 years of age.
4. Have a total household income that falls within the Household Income Limit guidelines established yearly, in conjunction with Canada Mortgage and Housing Corporation.
5. Be able to cope independently in a self-contained unit.
6. Not be a former client of the Manitoba Housing Authority, or The Manitoba Housing and Renewal Corporation or its agents, who owes arrears or has had arrears written off.
7. Not a person previously evicted as a result of property damage or anti-social behaviour.

Source: MHA Operating Manual, Applications and Tenanting Module.

We examined a sample of 108 tenant files (83 MHA and 25 sponsor-managed). We found that the standard MHA application form had been appropriately completed for all tenants and that the files appropriately documented how the applicants met six of the eligibility criteria listed. Eligibility criteria are illustrated in Figure 13.

The last criterion noted in Figure 13 deals with behavioral suitability of an applicant and involves conducting reference checks with prior landlords. In our sample of 108 tenant files, 37 became tenants within the last four years. We examined these files for evidence that reference checks were conducted. Of the 37 files (27 MHA and 10 sponsor-managed), only one file (MHA-managed) included documentation of a reference check. Officials advised that they contact the previous landlords although they do not document these discussions. Because of the lack of documentation, we could not determine whether MHA and sponsor officials adequately assessed the applicants' eligibility under this criterion.

Management stressed that MHA provides housing to those in need, as a first priority and, as such, they would provide housing to many of the applicants who would not successfully pass a reference check on their previous tenancy. They indicated that reference checks, when conducted, are as much to determine a successful rental history as they are to determine other supports that an applicant may require while residing in a MHA unit.

> **R15 We recommend that MHA and sponsors document the results of reference checks for behavioral suitability in tenant files.**
>
> *COMMENTS OF OFFICIALS*
>
> *Reference checks for applicants may be difficult to gather from current landlords. Further, many MHA applicants do not have tenancy history. Management agrees, however, that all attempts at reference checks – successful or not – should be documented in the Tenant Management System.*
>
> **R16 We recommend that the Department revisit its tenant eligibility criteria to ensure consistency with existing practices.**
>
> *COMMENTS OF OFFICIALS*
>
> *As previously noted, the Audit Report reflects a point-in-time snapshot of the organization during a very dynamic period. The review of eligibility criteria, as with other major policy areas, continues to be an ongoing process.*

2.3 The Need To Better Understand The Extent To Which Units Are "Under-Filled"

Officials from both MHA and sponsor groups indicated that they strive to adhere to the National Occupancy Standard. The National Occupancy Standards, in essence, match household sizes to the required number of bedrooms taking into account the sex and age of household members. Complying with the National Occupancy Standards, whenever possible, is important because housing that best meets clients needs makes the most effective use of the housing stock.

MHA-managed

For MHA-managed projects, we compared the recorded size of the households living in the 1,488 occupied housing units in our sample to the National Occupancy Standard. We identified 60 instances (4%) where the household size was smaller than the National Occupancy Standard for the size of unit (under-filled), for example, a household of two persons (the tenant and one dependent) living in a three bedroom unit.

MHA senior management advised that their approach to tenant management results in under-filled units. They advised that under-filling a unit can be used as a vacancy reduction strategy for projects with chronic vacancies or for humanitarian reasons, such as when household size decreases due to a death or a former dependent leaving, or to address the needs of the disabled. However, we noted that information was not gathered on the extent of, or reasons for, under-filled units.

Management advised that staff often suggest to tenants in under-filled units that a move to an appropriately sized unit would assist other families in securing appropriate housing, but noted that many tenants indicate that they do not wish to move. Further, Management noted that under-filling was a by-product of changing family situations over a long period of time.

Sponsor-managed

With regard to sponsor-managed units, three sponsors identified that they had tenants living in under-filled units in order to avoid vacancies. Sponsor officials also advised that they allow tenants to remain in under-filled units after the death of a spouse or family member or a reduction in family size.

For both MHA and sponsor-managed projects, we understand that there may be many valid reasons for under-filling housing units. However, we also believe that there is a cost associated with under-filling units because they represent a sub-optimal use of the property. As such, the extent to which under-filling is occurring and the benefits derived from this strategy should be well understood and managed by the Department and the MHA.

R17 We recommend that the Department and the MHA periodically assess the extent to which under-filling of housing units is occurring and the reasons for it. Based on this information, appropriate strategies should be enacted.

COMMENTS OF OFFICIALS

The Department will explore this Recommendation. Property managers and district managers are generally aware of the degree of underfilling in their portfolios. New applicants are typically housed in accordance with the National Occupancy Standards; however, subsequent changes in household size occur over time (e.g., death in the family). During the annual lease renewal process, when family information is submitted for review, staff regularly review whether or not a housing unit is under-filled.

In instances where there is a waiting list for a project, staff will generally pursue with the tenant whether he/she would be willing to move to a unit of appropriate size. However, limiting factors in this initiative include the availability of appropriately sized units for the currently under-filled household, the household's willingness to transfer to a smaller unit, and discretionary funds necessary for the preparation of the new unit. The MHA does not insist that a family move out of their home because of a change in family size/status.

2.4 Other Matter

2.4.1 The Need for An Effective Quality Assurance Review Process on Tenant Files

An effective quality assurance review process provides senior management with assurance that the organization is complying with established policies and procedures. Such reviews are typically conducted by knowledgeable individuals independent of the area reviewed, focus on the key functions within the area, and examine a sufficient number of transactions. To be effective, reviewers must have access to required documents and pertinent personnel.

An effective quality assurance review process can identify, in addition to the lack of compliance, training needs, opportunities to improve efficiency, and needed amendments to policy, procedures and related forms.

Staff of MHA advised that they periodically review a sample of tenant files within each portfolio area to verify the accuracy of rental calculations and lease renewals. We acknowledge that these are valuable areas to review but believe a more comprehensive cyclical review of operations of each portfolio is needed, such as the application process, applicant placement and collection of arrears.

Regarding the above noted review work conducted by MHA, we were advised that the files selected for review are typically selected by the branch offices rather than by the reviewer. This heightens the risk of a biased sample and as a result may not identify deficiencies. We also found that the extent of tests and results of the file reviews are not consistently documented. As such we were unable to assess the adequacy of the existing practices.

R18 We recommend that MHA develop a more comprehensive and effective Quality Assurance Review process.

COMMENTS OF OFFICIALS

The MHA currently undertakes quality assurance reviews. The scope of these reviews is expanding to be more comprehensive. Further, the Department will take appropriate steps to ensure that the process used to undertake the reviews is effective.

3. ARE ELIGIBLE APPLICANTS PLACED IN A TIMELY AND EQUITABLE MANNER?

WHAT WE CONCLUDED

While MHA has developed an automated process to facilitate the timely and equitable placement of applicants, because of limited documentation of 'point-in-time' applicant priority rankings, we were unable to assess whether the automated process significantly influenced placement decisions. Nonetheless, we observed opportunities to more effectively manage the timely placement of top priority applicants and the waiting list of approved applicants.

It is important to note that we did not audit the appropriateness of the placement priority assigned to approved applicants, or the accuracy and completeness with which this information is entered into the tenant management system.

Key indicators for demonstrating the effectiveness of the program's placement process would include the size and growth of waiting lists relative to unit vacancies, the demonstrated ability to appropriately prioritize approved applicants and the length of time needed to place top priority applicants.

We did not review this question for sponsor-managed projects because we noted that waiting lists by project included few applicants.

Many factors contribute to the challenge of placing approved applicants. These factors include:

- Availability of the required size of unit, including the proper mix of unit types within a housing project and Province-wide, and the effective management of vacancies;
- Economic conditions that would influence the demand for public housing;
- Organizational capacity in matching and coordinating applicants with vacant units; and
- Respecting applicant preferences regarding location.

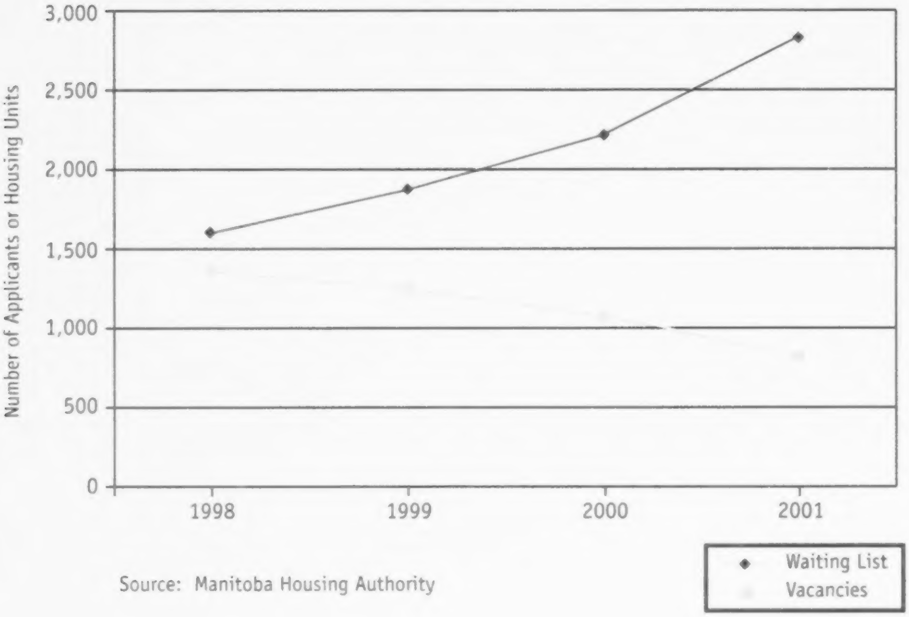
Because of these challenges, waiting lists can increase in size despite administrative efforts to place applicants.

As illustrated in Figure 14, at March 31, 2001, the Province-wide waiting lists had grown to a total of 2,832 applicants, an increase since March 2000 of 612 applicants or just over 28%. Since March 31, 1998, MHA has experienced a 76% (1,227 applicants) increase in its waiting lists. The significant growth in the waiting lists despite the significant decreases in vacancy rates, as discussed in the section that follows, challenges MHA and the Department regarding their stated mission to "assist Manitobans to have access to adequate and affordable housing."

It should be noted that at March 31, 2001 the waiting list contained 460 applicants that were current tenants in MHA housing but were wishing to transfer to another unit. Information on the number of transfer requests on waiting lists for prior years was not available but management advised that this number was likely very constant in a range from 350 to 450.

FIGURE 14

Multi-year Comparison of the
Number of Applicants on MHA Waiting Lists
and the Number of Vacant Units



Source: Manitoba Housing Authority

We examined two key areas regarding the management of waiting lists:

3.1 Prioritizing and placing approved applicants
3.2 Updating waiting lists

WHAT WE FOUND

3.1 The Need To Strengthen The Applicant Placement Process

It is important to note that we did not audit the appropriateness of the placement priorities assigned to approved applicants (that is the appropriateness of client circumstance information input into the automated system or the qualitative judgements made by staff), but rather examined the prioritization processes in place.

MHA has defined the various circumstances that help establish the priority of each approved applicant. Of note, as illustrated in Figure 15, victims of domestic violence are automatically assessed as a top priority. To ensure the validity of its top priority assessments, MHA requires a referral letter from an appropriate source, such as social services professionals or law enforcement officers.

We observed that the automated Tenant Management System (TMS) applied a point rating to each noted circumstance and generated a numerical ranking for each approved applicant. In addition, we noted that policies and procedures had been developed to guide the placement of approved applicants.

FIGURE 15

Main Categories of the Rating System	Maximum Points
Affordability, which considers the applicant's level of income, their ratio of rent to income, and their liquid assets.	75
Suitability, which considers current overcrowding.	15
Adequacy, which addresses the physical condition of the current property.	45
Special Consideration, which considers disability and exceptional circumstances such as notice to vacate, separated couples through lack of accommodation, and health factors.	75
Transfer Application, which considers health factors, change in unit size requirement, proximity to schools, and tenant relations and safety considerations.	40
Maximum score	**250**
Priority Placement, special priority placement for victims of domestic violence.	251
Maximum score - Priority Placement	**251**

Source: MHA Operating Manual, Applications and Tenanting Module

We observed that the TMS provided real time information to MHA property managers on each applicants' point rating and produced prioritized waiting lists by district. We noted that property managers were able to review the waiting lists on-line to identify those applicants requiring priority housing within their district.

We are concerned about the following three areas:

3.1.1 Documentation to support placement decisions.
3.1.2 Timely placement of top priority applicants.
3.1.3 Applications on the waiting list with "0" points.

3.1.1 Placement decisions should be documented

We noted that documentation was not generated by the TMS to support the placement decisions made. Management advised that the point rating system was only one input, although major, to placement decision-making. Other qualitative and circumstantial factors also influenced decisions. Because of this lack of documentation, we could not audit whether, or how, the point rating system was used in making placement decisions, with the exception of top priority cases as is discussed below.

R19 We recommend that the rationale for placement decisions be documented, including the results of the point rating system.

COMMENTS OF OFFICIALS

It is important to note that personal choice with respect to region and neighbourhood, in addition to availability of particular unit sizes, largely dictates placement decisions. With respect to transferred tenants, *documentation is detailed on the transfer application itself. The justifications for transfers are limited to educational and employment opportunities, changes in family matters, and health and safety considerations. Staff have been instructed to document placement decisions on the TMS. Such documentation will be included in the scope of the comprehensive quality assurance review process.*

3.1.2 Not always possible to place top priority applicants in a timely manner

The MHA seeks to place its top priority applicants within ten days. While not a formal performance target of the MHA, the 10 days reflects the typical crisis shelter timeline target for the provision of emergency shelter. Achieving this target would facilitate the movement of clients from a crisis shelter to a public housing unit without any other temporary accommodation.

We examined the October 2, 2000 and December 31, 2000 Province-wide waiting lists. Not including transfers and cancellations, there were 20 top priority applicants on the lists. As shown in Figure 16, nine applicants were not housed within MHA's target of ten days. While management acknowledged the need to place top priority applicants in a more timely manner, they spoke of placement difficulties because of client location preferences and the lack of available vacant units thereat.

FIGURE 16

Length of Time to House Maximum Point Rating Applicants on the October 2 and December 31, 2000 Waiting Lists

Time Required to Place the Applicant	Number of Applicants	Winnipeg	Rural
10 days or less	3	2	1
Between 2 and 4 weeks	3	2	1
Greater than 4 weeks	5	4	1
Cancelled	8	4	4
Still on Waiting List as at March 31, 2001	1	-	1
Total	20	12	8

When we began our audit we observed that there was no central tracking and coordination for the placement of top priority applicants. In November 2000, the Marketing and Promotions Branch of MHA began, for the Winnipeg district, to centrally track and coordinate the placement of top priority applicants. Each rural office continues to track and place their own top priority applicants.

We also observed that performance information was not centrally compiled, by district or by project, regarding the length of time required to place applicants and the reasons for the placement of top priority applicants beyond the ten day target. In our view, placement performance should be tracked for each of the following categories: top, high, mid and low priority applicants. This information would provide the MHA with a better understanding of its ability to meet public demand for housing and to communicate wait time expectations to applicants on the wait lists.

R20 We recommend that the MHA monitor its performance regarding the length of time to place top, high, mid and low priority applicants. Based on this information, appropriate strategies should be enacted.

COMMENTS OF OFFICIALS

The Department will explore this recommendation. Applicants on the waiting list are housed as soon as it is possible to do so, in accordance with housing need. However, the MHA cannot house unless an appropriate unit is available in a location of the tenant's choice. With respect to Priority Placement applicants, the MHA always attempts to house these high priority tenants within the suggested 10-day period.

3.1.3 *MHA should review the appropriateness of all point ratings of "0"*

As illustrated in Figure 17 we identified 287 applicants on the October 2, 2000 list and 191 applications on the December 31, 2000 waiting list that had an assigned point rating of "0".

FIGURE 17

Number of Applicants on MHA Waiting Lists with Point Ratings of "0"

	October 2, 2000				December 31, 2000			
	Date of Application (Calendar year)				Date of Application (Calendar year)			
	1998 and Prior	1999	2000	Total	1998 and Prior	1999	2000	Total
Winnipeg	16	66	66	148	11	32	36	79
Rural	41	66	32	139	32	49	31	112
Total	57	132	98	287	43	81	67	191

Source: Manitoba Housing Authority

While it is possible for an applicant to be appropriately assessed a point rating of "0", the number of such occurrences seemed excessive. When these scores were brought to management's attention, they spoke of administrative errors. We did not attempt to determine the appropriateness of each of the "0" point assessments, however, in an environment of increasing waiting lists and diminishing vacancies, applicants with assessments of "0" have virtually no likelihood of placement. This is particularly a problem if the "0" assessment is the result of an administrative error.

R21 We recommend that the MHA assess the validity of all "0" point assessments and strengthen controls to prevent reoccurrence.

COMMENTS OF OFFICIALS

The Tenant Management System (TMS) was still in the process of being fully implemented during the period of the audit. A point rating of "0" at the time of application is not valid; a minimum of 50 points is assigned for all approved applicants. The existence of "0" point ratings at the time *of the audit is a direct result of the infancy of TMS. Many of these are files that were created in TMS for testing purposes. Other "0" point ratings were the result of administrative error due to the lack of familiarity by some staff with TMS at the time of the audit. These situations have been reviewed and corrected.*

3.2 The Need To Ensure Waiting Lists Are Updated Annually

When demand for a service exceeds an organization's capacity to deliver, waiting lists should be created and reflect the relative priorities for access to services. This helps to ensure that clients are assisted in the best order possible. With the passage of time, however, also comes the need to ensure that individuals on the waiting lists are still eligible for the service and still desire the service. Periodically updating waiting lists ensures an organization has an accurate understanding of the current demand for their services and promotes greater efficiency when processing applicants on the waiting list.

We were advised that all approved applicants are initially included on a waiting list. Separate waiting lists are maintained for the Winnipeg District Office as well as for each of the rural districts.

MHA policy requires an annual applicant update by each district. District Offices are required to write to each applicant on their waiting list and request the applicant return a completed application update form if they are still interested in public housing. The application update form provides current information on household size, income and rent payments. However, we found that for the scheduled March 31, 2001 update, four of ten Winnipeg satellite offices had not sent update forms. While we did not audit the update process in the eight rural offices, management advised that for March 2001, two offices had not updated their waiting lists.

R22 We recommend that MHA require confirmation annually that district offices have updated their waiting lists.

COMMENTS OF OFFICIALS

The Department accepts this recommendation.

4. ARE VACANCIES KEPT TO A MINIMUM?

WHAT WE CONCLUDED

As measures of how successfully vacancies are kept to a minimum, we analyzed the level of vacancies incurred by MHA and sponsors on an overall basis, by geographic location, by specific type of unit and by specific housing project.

While vacancies in MHA's Winnipeg properties have significantly decreased since 1998, we concluded that further actions were needed to minimize chronic vacancies, particularly in rural districts, and to reduce unit turnovers.

Many factors contribute to the vacancy rates experienced by MHA and sponsor groups. Factors which they can control or influence include:

- number of units in service,
- marketing effort,
- quality of facilities and customer service,
- suitability and mix of unit types,
- turnovers, and
- administrative effectiveness (processing turnovers, etc.).

External factors which MHA and sponsor groups cannot control include:

- market/economic conditions,
- criminal activity in the vicinity of a housing project, and
- an applicant's preferred location.

We recognize that these external factors can have a profound impact on the effectiveness of MHA and sponsor efforts to reduce unit turnovers and minimize chronic vacancies.

With respect to our discussion in section 4.1, we did not audit the accuracy and completeness of the vacancy and turnover information recorded in the tenant management system.

WHAT WE FOUND

4.1 Analysis of Vacancies Experienced By MHA-managed Projects

4.1.1 Summary comments

With respect to the Winnipeg District, as at March 31, 2001, the vacancy situation was generally positive. Of note was that the District had a vacancy rate of 3.7%. While the District had also experienced a significant decrease in unit vacant months lost, as at March 31, 2001, the unit vacant months lost remained, in our view, significant at 5,400. Chronic vacancies had decreased sharply in fiscal 2001, but we noted that studio units remained a problem. In addition, we noted that turnovers remained high at approximately 30%.

Unit vacant months lost refers to the total number of months that in-service units were vacant during the year.

With respect to the Rural Districts, vacancy rates have remained relatively unchanged since 1998 at approximately 11% as have unit vacant months lost at approximately

7000. Turnovers also remained high at 27%. We noted that chronic vacancies accounted for 75% of vacancies (412 of 552) and that studios, one and three bedroom suites remained a significant challenge. Of particular note is that 41 of the 412 (10%) chronically vacant units were located in one northern community experiencing severe economic difficulties.

4.1.2 Performance against targets

The Department's 1999/2000 Business Plan identified specific vacancy targets for the Winnipeg and the Rural District Offices, as shown in Figure 18. We note that the Winnipeg District Office achieved its projected vacancy rate target but that the Rural District Offices did not.

FIGURE 18

Key Targets for the Fiscal Year Ended March 31, 2000

District	Vacancy Rate (%)			Turnover (Units)			Unit Vacant Months Lost		
	Target	Actual	Variance	Target	Actual	Variance	Target	Actual	Variance
Winnipeg District Office	8.5	6.5	2.0	2,300	2,424	124 5.4%	*	6,535	*
Rural District Offices	8.7	11.0	2.3	1,357	1,612	255 18.8%	5,500	6,986	1,486 27.0%
Total				3,657	4,036	379 10.4%	*	13,521	*

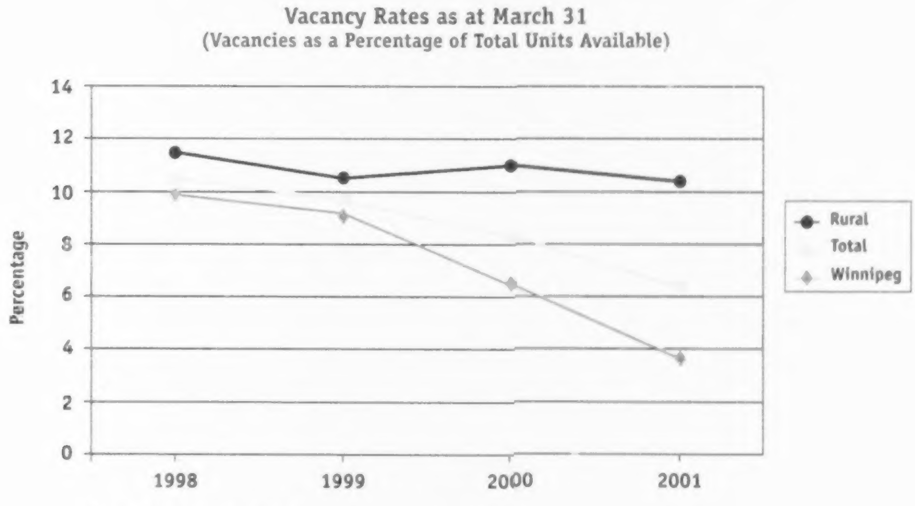
* Target not prepared.

Source: Department of Family Services and Housing 1999/2000 Business Plan.

4.1.3 Overall vacancy rate

As illustrated in Figure 19, MHA has, since 1998, experienced an overall positive vacancy trend. The overall vacancy rate has dropped from 10.5% at March 31, 1998 to 6.4% at March 31, 2001.

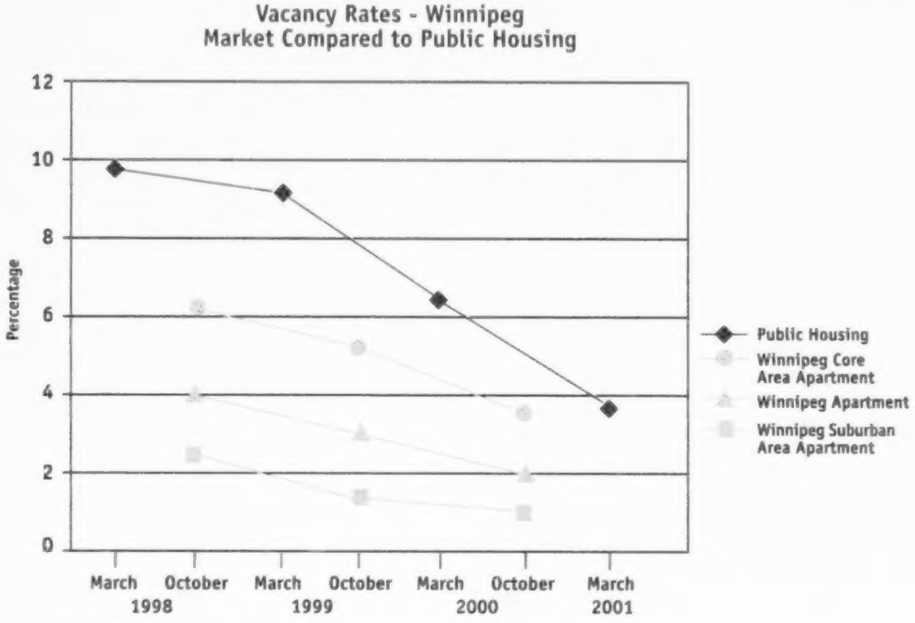
FIGURE 19



Source: Manitoba Housing Authority

The drop in the vacancy rate is attributable entirely to the Winnipeg district where the vacancy rate dropped from 9.9% at March 31, 1998 to 3.7% at March 31, 2001. This decrease is consistent with the Winnipeg private market vacancy rates that also have significantly decreased since 1997, as illustrated in Figure 20.

FIGURE 20



Source: Manitoba Housing Authority
CMHC Annual Market Survey Data

Rural vacancy rates have remained relatively constant since 1998 at approximately 11%. Private market vacancy rates for each rural district are not available.

Of particular note regarding MHA vacancies is the practice of temporarily removing units from active service and also removing them from the list of vacant units. Figure 21 illustrates the fluctuations in available units from fiscal 1998 to 2001. While there are many reasons for temporarily removing a unit from service, such as to facilitate extensive repairs and to reduce operating costs for projects experiencing significant chronic vacancies, we believe that Departmental statistics should continue to reflect these units as being vacant. To do otherwise understates the situation MHA is actually dealing with.

Nonetheless, we acknowledge the results achieved by management in ensuring Winnipeg vacancy rates overall decreased along with the market.

FIGURE 21

Available Units as at March 31

Area	1998	1999	2000	2001
Winnipeg	7,615	7,606	7,681	7,579
Rural	5,326	5,294	5,337	5,298
Total	12,941	12,900	13,018	12,877

Source: Manitoba Housing Authority

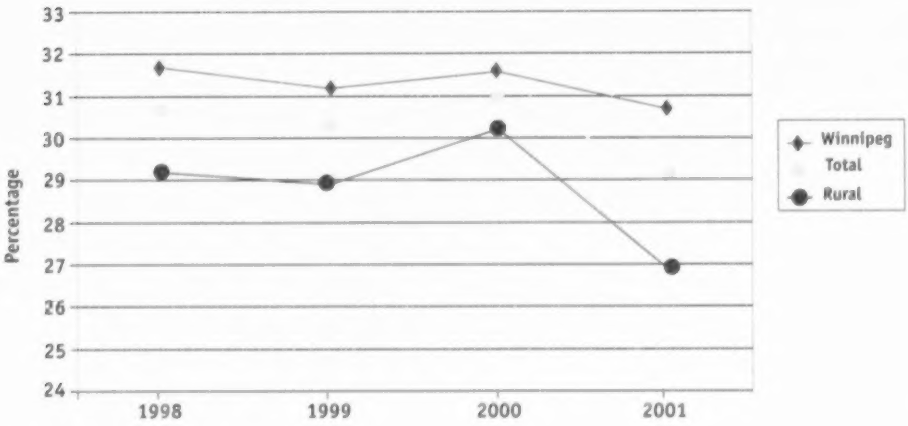
4.1.4 Impact of unit turnovers (a tenant vacating a unit)

A significant contributor to MHA vacancy rates, for both Winnipeg and rural districts, is unit turnover. As shown in Figure 22, MHA-managed units have, since at least 1998, experienced turnover rates of approximately 30%. This means that the base vacancy rate, as at March 31, 2001, assuming that units are vacant for a month to facilitate transitions, was approximately 2.5%. As such, for the Winnipeg area, the vacancy rates attributable to turnovers exceeded the overall private market apartment vacancy rate of approximately 2%. This means that market vacancy rates cannot be achieved unless the occurrence of unit turnovers can be reduced.

The difference between the above noted base vacancy rate of 2.5% and the actual vacancy rate of 3.7% (Figure 20) is attributable primarily to chronic unit vacancies, which are discussed in section 4.1.6.

FIGURE 22

Annual Unit Turnovers at end of March 31
(Vacancies as a Percentage of Total Units Available)



4.1.5 Unit vacant months lost

Because a vacancy rate is in essence a snapshot in time, it only describes part of the vacancy performance. The "unit vacant months lost" figure captures the total number of months that in-service units were vacant during the year. As illustrated in Figure 23, the Winnipeg district experienced significant decreases in unit vacant months lost in 1999 and 2001. Nonetheless in our view, unit vacant months lost remained high. Focussing on the fiscal year 2001, when we factor out the vacancies due to turnovers, the Winnipeg district experienced actionable vacancies of approximately 3,100 unit months. In dollar terms, assuming monthly rentals of $330, the revenue lost was approximately $1.0 million.

The impact of unit vacant months lost is more pronounced in the rural districts where actionable vacancies have only decreased slightly since 1998 (from 5,600 to 5,200). In dollar terms, for fiscal year 2001, assuming monthly rentals at $330, and factoring out units located in the northern community discussed in section 4.1.6 for which revenue opportunities were very limited, the revenue lost was approximately $1.7 million.

In this report, **actionable vacancies** refer to unit vacancies of two or more consecutive months, but not including the month following the date the unit was vacated (typically a transitional month).

FIGURE 23

Annual Unit Vacant Months Lost - Analysis by Fiscal Year

Area	1998	1999	2000	2001
Winnipeg				
Available units	7,615	7,606	7,681	7,579
Total unit months available	91,380	91,272	92,172	90,948
Unit vacant months lost	9,486 10.4%	6,675 7.3%	6,535 7.1%	5,411 5.9%
Unit vacant months lost due to turnovers	2,416	2,375	2,424	2,324
Actionable unit vacant months	7,070	4,300	4,111	3,087
Revenue lost	$2,121,000	$1,290,000	$1,233,000	$1,019,000
Rural				
Available units	5,326	5,294	5,337	5,298
Total unit months available	63,912	63,528	64,044	63,576
Unit vacant months lost	7,183 11.2%	6,912 10.9%	6,986 10.9%	7,014 11.0%
Unit vacant months lost due to turnovers	1,553	1,530	1,612	1,424
Unit vacant months lost due to extended vacancies in one northern community as discussed in 4.1.6				430
Actionable unit vacant months	5,630	5,382	5,374	5,160
Revenue lost	$1,689,000	$1,615,000	$1,612,000	$1,703,000

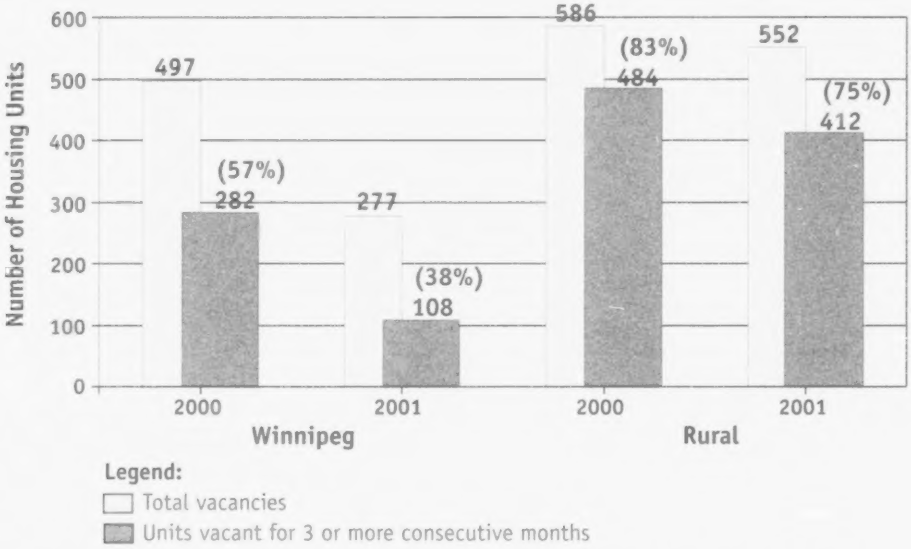
Source: Manitoba Housing Authority

4.1.6 Chronic vacancies

As illustrated in Figure 24, we noted that chronic vacancies (those units vacant for three consecutive months or more) were a significant component of overall vacancies throughout the Province as they accounted for 39% of Winnipeg vacancies and 75% of rural vacancies.

FIGURE 24

Chronically Vacant Units as at March 31



Looking at chronic vacancies by unit type, as illustrated in Figure 25, we noted that studio units in both Winnipeg and rural areas were a problem because, for the fiscal year 2001, they represented 79% (85 units) and 39% (160 units) of vacancies, respectively. One and three bedroom units in rural areas were also a problem as they represented, in fiscal year 2001, 25% (103 units) and 23% (96 units) of vacancies, respectively. We noted that the significant reduction in two bedroom vacancies in Winnipeg during fiscal year 2001 was attributable, in large part, to the permanent removal from service of 88 units from one housing project.

Of note is that projects located in one northern community accounted for 41 of the 412 chronic vacancies as at March 31, 2001 (25 of the 96 vacant 3 bedroom units). This community was experiencing severe economic difficulties. In this situation, we recognize that the options available to the MHA are limited.

FIGURE 25

Units Vacant for 3 Months or More as at March 31
(Significant variances shown in bold)

	Winnipeg				Rural				Total			
	2000		2001		2000		2001		2000		2001	
	Units	%	Units	%	Units	%	Units	%	Units	%	Units	%
Studio	**96**	**34**	**85**	**79**	**140**	**29**	**160**	**39**	**236**	**31**	**245**	**47**
1 Bedroom	11	4	9	8	**115**	**24**	**103**	**25**	126	16	112	22
2 Bedrooms	**121**	**43**	7	**6**	32	6	21	5	153	20	28	5
3 Bedrooms	44	15	6	6	**158**	**33**	**96**	**23**	202	26	102	20
4+ Bedrooms	10	4	1	1	39	8	32	8	49	7	33	6
Total	282	100	108	100	484	100	412	100	766	100	520	100

Source: Manitoba Housing Authority

4.1.7 By specific housing project

We examined the vacancy experience of housing projects with 10 or more vacant units and vacancy rates of 10% or more, at both March 31, 2000 and March 31, 2001. We identified 21 such housing projects; 11 of the projects were in Winnipeg and 10 were rural. We found that vacancy rates improved between March 1999 and March 2001 for nine of the projects (eight in Winnipeg, one rural) but worsened for seven (two for Winnipeg, five for rural), five showed no change (one for Winnipeg, four rural).

The above noted 21 projects accounted for 32% of all vacancies as at March 31, 2001. We noted that in the rural districts there were many smaller projects with fewer than 10 vacancies that were experiencing vacancy rates well in excess of 10 %.

4.2 Analysis of Vacancies Experienced by Sponsor-Managed Projects

With respect to the 52 sponsor-managed projects, we found that the overall vacancy rate as of both April 30, 2000 (March 31, 2000 figures were not available) and March 31, 2001 was 6%. Nine projects or 17 % of the overall portfolio experienced 10 or more vacancies and a vacancy rate exceeding 10% as at March 31, 2001. These nine projects experienced similar vacancies and vacancy rates as at April 30, 2000. Among these nine projects, three had a vacancy rate of 20% or higher. In total, these nine projects, all located in Winnipeg, accounted for 148 vacancies or 73% of all vacancies experienced by the sponsor-managed portfolio.

4.3 The Management Of Vacancies

We enquired of MHA's and the Department's approach in dealing with chronic vacancies or problem projects and are concerned about the lack of :

4.3.1 Comprehensive, documented, action plans targeting building types or specific housing projects with chronic vacancies.
4.3.2 Information on reasons for unit turnovers.
4.3.3 Performance targets for 2001.

4.3.1 Need for comprehensive action plans to address projects with significant chronic vacancies

Operational units commonly must manage a unique combination of internal and external factors to ensure their performance meets expectations. Unit management must thus develop action plans in response to their specific environments. While central initiatives can help alleviate the performance impacts of certain factors, these initiatives must be viewed as an element of the operating unit's action plan.

MHA-managed

As noted in our above vacancy analysis, chronic vacancies are a significant challenge for MHA. The lost revenue associated with such vacancies is high. The Vacant Unit Months Lost figures help to quantify this cost, as illustrated in Figure 23.

Senior management spoke of many initiatives aimed at reducing the number of vacant units in general. Examples of initiatives undertaken by management to attract or retain tenants included:

- a marketing strategy involving eight Winnipeg housing projects;
- discontinuing the use of rents based on income in favor of a maximum rent charge for certain problem housing projects;
- changing the designation of housing projects or portions of projects from exclusively seniors housing to mixed housing;
- enhancing curb appeal (the external appearance or the housing unit or project);
- implementing central tenant call center where tenants can call to request maintenance work, lodge complaints, or make general inquires about their tenancy;
- using annual customer satisfaction surveys to solicit tenant feedback;
- seeking alternative uses for facilities such as day care, commercial retail, and domestic violence shelters;
- onsite community policing to increase the safety and security of tenants at selected housing projects; and
- providing low cost meals to seniors at select sites.

MHA officials indicated that the vacancy rates incurred by each project are tracked and that property managers are asked to explain their performance and to identify what they plan to do to bring vacancies down. However, we noted that specific action plans in relation to noted problem areas or housing projects have not been documented.

Given the uniqueness of each housing project, tailored action plans would link specific initiatives to the unique characteristics or circumstances giving rise to the chronic vacancies within a housing project. Planning efforts should seek a coordinated/ integrated approach, by housing project, to initiatives such as marketing, client service, unit condition and alternative uses.

Such plans would serve as a communication tool regarding acceptable or desired vacancy levels by project. For example, in some rural communities where demand is currently low, but where MHA predicts increased demand in the future (based on future demographics), MHA may choose to hold units in anticipation of future demand, rather than change their use or to dispose of the property. We also note that such project plans cannot be created in isolation of other projects located nearby (MHA or sponsor managed), as this could result in the counter productive movement of tenants rather than reducing vacancies overall.

We also observed that the management reporting system did not routinely capture and report on the length of time housing units have remained vacant. As part of our analytical procedures, we had to request that such a report be prepared. This information is essential to identify chronic vacancies and to monitor the progress of the strategies to reduce vacancies.

Sponsor-managed

With respect to sponsor-managed projects, Department management advised us that they were aware of the vacancy problems with some of the Winnipeg housing projects and that they were taking action in a number of areas. While some documentation was maintained which referred to the vacancies and strategies to address them, we could not locate comprehensive strategies and action plans for these projects.

R23 We recommend that the Department and the MHA develop coordinated and comprehensive action plans for projects with high levels of chronic vacancies.

COMMENTS OF OFFICIALS

Action plans are developed for units and projects with high levels of chronic vacancy, including possible changes in unit use and various marketing strategies. There are many complex factors that contribute to unit vacancy. Documentation of action plans will be enhanced. Management wishes to emphasize the significant decrease in unit vacancy that has occurred in Winnipeg (representing more than 1/2 of the portfolio) since 1998.

R24 We recommend that the Department develop a routine report from its management information system on the length of time units have remained vacant. This information would facilitate the monitoring of chronic vacancies and the development of action plans.

COMMENTS OF OFFICIALS

The Department had determined this need prior to the audit period, and has created an aged vacancy report for MHA properties to be used in decision-making. It should be noted that there are many complex factors that contribute to unit vacancy. For sponsor-managed projects, the number of vacancy months for the project is included in the Annual Project Data Report (APDR).

4.3.2 The need for better information on the reasons for unit turnovers

Given the nature of public housing, substantial unit turnovers may be unavoidable. However, we note that information on the reasons for unit turnovers is not accumulated by the MHA. Management advised that several factors impact turnover rates but estimated that only 10% of turnovers were related to the improved financial situation of the tenant. Information on the reasons for turnovers is essential in developing initiatives to reduce preventable turnover.

Significant cost savings could be achieved if the number of unit turnovers were reduced. Internal management reports indicate that the turnover cost to prepare a housing unit for the next tenant, including the costs to repair the unit, totalled for the year ended March 31, 2001 $2,200,000 for the Winnipeg district ($970 per turnover) and $790,000 for the rural districts as a whole ($555 per turnover). A one percent reduction in the Winnipeg district turnover rates from 30.7% to 29.7% (or 73 units) could trigger savings of approximately $71,000.

R25 We recommend that the Department gather appropriate information regarding the reasons for unit turnovers. Based on this information, appropriate strategies should be enacted.

COMMENTS OF OFFICIALS

The Department will explore this recommendation. Management wishes to note that more formal collection by the MHA of information regarding reasons for turnover would be entirely dependent on a departing tenant's willingness to provide this information on a voluntary basis.

4.3.3 The need to improve performance measurement

Setting performance targets helps management identify areas where corrective action is warranted.

For 1999/00 the Department prepared a Business Plan and a performance framework that identified a number of specific objectives and their performance indicators. Specific vacancy rate targets were set. For 2000/01, however, these documents were not prepared because they were no longer required by the Treasury Board Secretariat. While a vacancy target was not formally set in 2000/01 for the Winnipeg District Office, vacancy targets were set for the rural districts. In addition, a draft performance measurement framework was prepared for the Rural District Offices that identified a number of goals and related strategies for each of the eight rural district offices.

R26 We recommend that the Department develop a performance framework for the Housing Division as a whole, and that it incorporate specific vacancy targets.

COMMENTS OF OFFICIALS

While management supports the concepts of performance management, the setting of vacancy targets is not considered to be advantageous. Accordingly, this practice has been discontinued. The MHA strives to maintain quality housing units for low to moderate income tenants, and strives to minimize the time that a vacant unit remains vacant; however, decisions by tenants to vacate a unit are generally beyond the control of the MHA (e.g., changes in economic circumstances, changes in family circumstances, and changes in personal and/or health needs).

5. ARE TENANTS CHARGED THE APPROPRIATE RENTAL FEE?

WHAT WE CONCLUDED

For our sample of 108 tenant files, we concluded that for both MHA and sponsor-managed housing projects, rental fees were appropriately calculated based on the information provided by the tenants. However, income verification practices should be strengthened.

We reached these conclusions by examining the following criteria:

5.1 rental fees should be accurately calculated using MHA formulaes;

5.2 rent should be based on appropriately verified income figures.

To assess these criteria, we reviewed a sample of 108 tenant files (83 MHA-managed and 25 sponsor-managed) pertaining to 20 housing projects. We also reviewed policies and guidelines, interviewed staff of the MHA and staff from the Portfolio Administration Unit of the Department and analyzed several years of performance information on the MHA and sponsor-managed projects.

WHAT WE FOUND

5.1 Rent Calculations Were Accurate

For the Manitoba public housing program, rental fees are based on household income, commonly referred to as rent-geared-to-income (RGI). Rent is calculated at 27% of gross income. An exception is made for tenants in studio units where a RGI ratio of 25% is used. For tenants on the Employment Income Assistance (EIA) program, rent is based on a predetermined scale according to household size.

MHA uses the automated TMS to calculate and post rents. No calculation errors were detected in our sample of 83 files.

For sponsor-managed projects, rents were calculated manually using MHA forms. No calculation errors were detected in our sample of 25 files.

5.2 The Need To Ensure Rents Are Based On Appropriately Verified Income Figures

On an annual basis, when renewing leases, public housing organizations should obtain appropriate documentation of a tenant's stated income level, for example a recent pay stub. In order to ensure completeness of reported income, organizations should also, on an annual basis, obtain certified copies of income tax returns from Canada Customs and Revenue Agency (CCRA).

MHA-managed

From our sample of 15 MHA-managed projects, we examined 43 RGI tenant files. We found that, for 40 tenants, income was appropriately verified to recent income documentation, as at their anniversary date. However, for the remaining three tenants, the prior year's income figures were used to calculate the current year's rent. Two were elderly tenants that received their income from federal sources. The potential for a significant increase in income for both of these tenants was not likely, although changes due to indexing should have been accounted for. The other situation was a family tenant. Ensuring accurate income figures for this situation was important because the income level for tenants in the workforce can vary significantly.

From our sample of 15 MHA-managed projects, we also examined 40 EIA tenant files. For these tenants, property managers verified EIA status instead of income levels. This is appropriate because EIA tenants are assessed a rental rate based on family size rather than one based on the RGI scale.

With respect to ensuring the completeness of reported income, MHA policy requires that a certified copy of a tenant's most recent income tax return be obtained from CCRA. For the 43 RGI tenant files examined, we found three instances where this information was not obtained. As a result, the MHA had no assurance on the completeness of the reported incomes for these tenants.

From our sample of 40 EIA tenant files we found nine instances where tax information was not obtained. In our view, however, because EIA tenants are subject to the rules of the EIA program and pay a flat rental rate rather than one based on income, it is easy to understand why the property managers did not see the value in requesting a certified copy of the income tax returns.

Sponsor-managed

In our sample of 25 sponsor-managed files from five housing projects, we found that all rents were based on the appropriate verification of income levels and that appropriate documentation was obtained. However, we also found that five elderly RGI tenant files did not contain the most recent certified copy of the tenant's income tax return from the CCRA.

R27 We recommend that, for RGI tenants, the MHA and the Department include income verification in their quality assurance review processes.

COMMENTS OF OFFICIALS

The MHA pursues current pay information, where applicable, in addition to the previous year's income tax information for RGI tenants, to verify income annually. In situations where income verification has not been made available, the MHA employs appropriate strategies with the tenant to obtain this information and remain tenanted. It should be noted, however, that not all MHA tenants file a tax return every year; which has an impact on the MHA's ability to verify income. The Department agrees to include income verification in the MHA's quality assurance process.

Management wishes to advise that subsequent to the audit, and independent of the findings/recommendations, the MHA developed a consent form, in conjunction with CCRA, whereby tenants may authorize the MHA to obtain documents as required directly from CCRA. This not only provides service benefits to the tenant, but also ensures that the MHA will be in receipt of this information, where applicable.

R28 **We recommend that, for EIA tenants, the MHA and the Department coordinate their income verification processes with that of the EIA program.**

COMMENTS OF OFFICIALS

The MHA coordinates its income verification processes with that of the EIA program to the extent possible, given information sharing considerations and differing program requirements. Since coming under the umbrella of one Department, the MHA and the EIA program have been working collaboratively to define and strengthen protocols between the two programs. The department will explore this recommendation further as we move toward more integrated service delivery.

6. ARE ARREARS BALANCES KEPT TO A MINIMUM?

WHAT WE CONCLUDED

As measures of how successfully arrears are kept to a minimum, we analyzed the level of current and past tenant arrears overall and by geographic location.

In our view, the significant increase in current tenant arrears since 1998/99 and the substantial write-offs of arrears each year since 1997/98 indicate that MHA should intensify their efforts to minimize the initial occurrence and subsequent growth of arrears.

We did not examine the arrears management practices of sponsor groups, nor did we assess the accuracy and completeness of the arrears information recorded in the tenant management system.

WHAT WE FOUND

6.1 Analysis Of Arrears

The Department's 1999/2000 Business Plan identified specific current arrears reduction targets for the Winnipeg and Rural District Offices. These reduction targets were not met. Rather, current tenant arrears increased.

As illustrated in Figure 26, MHA has experienced a significant increase in current tenant arrears in both the Winnipeg and Rural District Offices. Between March 31, 1999 and March 31, 2001, the Winnipeg District Office arrears doubled to $189,351. Rural District arrears increased within this timeframe by 31% to $108,059.

FIGURE 26

Current Tenant Arrears as at March 31

Area	1997/98	1998/99	1999/00	2000/01
Winnipeg	$ 96,309	$ 94,451	$157,007	$189,351
Rural	72,569	82,439	87,521	108,059
Total	$168,878	$176,890	$244,528	$297,410

Source: Manitoba Housing Authority

When a tenant ceases occupancy, any outstanding arrears are transferred from the current arrears category to the past tenant arrears category. Each fiscal year, MHA staff review the past tenant arrears accounts and determine those accounts where collection efforts should be discontinued. These are presented to MHA and MHRC Board of Directors for approval and write-off.

Figure 27 shows that write-offs over the last four years totalled $1,885,482.

FIGURE 27

Past Tenant Arrears Write-offs as at March 31

Fiscal Year	Rentals	Damages	Total
1997/98	$ 423,260	$ 144,265	$ 567,525
1998/99	274,260	124,459	398,719
1999/00	232,754	135,262	368,016
2000/01	342,873	208,349	551,222
Total	**$ 1,273,147**	**$ 612,335**	**$ 1,885,482**
	68%	32%	100%

Source: Manitoba Housing Authority

6.2 Management of Arrears

Given the increasing arrears levels, we are concerned about:

6.2.1 The level of arrears for tenants on EIA.
6.2.2 The clarity of collection policies.

6.2.1 The need for alternative collection approaches for tenants on EIA

In our view, the MHA has needlessly incurred rental losses and increased its arrears follow-up effort as a result of its reluctance to insist that all EIA tenants have their rent paid directly by the EIA program.

As noted in Figure 27, 68% of the write-off since 1997/98 ($1.27 million) are attributable to rental arrears. Management reports for 1999/00 and 2000/01 reveal that 68% and 54% of the rental write-offs, respectively, were from past tenants on EIA. Assuming an average EIA rental arrears write-off percentage of 60%, of the $1.27 million in rental arrears write-offs since 1997/98, approximately $764,000 relates to past EIA tenants.

Although the opportunity exists, MHA has not insisted that all EIA tenants have their rents paid directly by the EIA program. We noted that many EIA tenants had opted for this service. MHA management advised that it would consider requiring direct payment only if an EIA tenant fell into arrears, as they believed such an approach would be more consistent with the philosophical mission of the MHA.

R29 We recommend that MHA promptly require direct ongoing payment of rent from the EIA program for EIA tenants that demonstrate difficulty in meeting rental obligations when due.

COMMENTS OF OFFICIALS

The Audit Report states that the MHA has needlessly incurred rental losses and increased arrears collection efforts as a result of a reluctance to have rent for EIA tenants paid directly. Management believes that requiring all EIA tenants to have their rent paid directly would be a discriminatory *practice, as direct payment from source is not required for RGI tenants. However, the MHA pursues direct payment of rent for EIA participants if the tenant is falling into arrears. Since coming under the umbrella of one Department, the MHA and the EIA program have been working collaboratively to define and strengthen protocols between the two programs. Enhanced protocols call for the MHA to request direct payment from EIA if a tenant's rent has not been received by the 20th of the month.*

Management also wishes to note that while arrears are considered to be a serious concern, the MHA's current tenant arrears as at March 31 for the past 4 years have not exceeded 0.6% of total rental revenue, as can be seen from Figures 3 and 26. Further, approximately 1/3 of the write-off of past tenant arrears over the last four years (as shown in Figure 27) are related to damages to suites left by former tenants, which is difficult for the MHA staff to control. It should also be noted that past tenant arrears write-offs related to rent (Figure 27) have remained lower than the 1997/98 level.

6.2.2 The need to clarify collection policies

The Winnipeg District Office has experienced a 64% increase in arrears by all offices from the 1998/99 levels. As at March 31, 2001 the Winnipeg District arrears totaled approximately $189,000 and four of the 10 satellite offices had arrears over $20,000; for one of these offices the arrears had more than doubled to $51,484. In rural district offices, only one of eight experienced significant increases. Of note is that one office experienced a significant decrease in its total arrears balance.

Management advised of a philosophical change in approach towards property management that occurred shortly after the amalgamation of the Department of Housing with the Department of Family Services in 1999. The approach changed from one that stressed the rent collector role to one that stressed working with tenants in arrears to find ways to bring their payments up to date. While policies were not amended, management characterized the change as a "kinder, gentler" approach. Our interviews with staff however, indicated they were not sure of how stringently the policies should now be applied.

Clear guidance on how existing policies are to be applied is essential to ensure all tenants are treated in an equitable and consistent manner. As discussed in section 2.1, a Policy Review Committee was established in 2000 and arrears policies were identified as a priority.

R30 We recommend that MHA issue guidelines to help property managers apply MHA collection policies in a consistent manner.

COMMENTS OF OFFICIALS

Prior to 1999, the mandate of the MHA was much more focused on the landlord function and the collection of rent. In the ensuing period, since being combined with the Department of Family Services, staff have focused on the delivery of holistic social services to families in need, while acknowledging the need for tenants to keep their rent current. As noted *earlier, the MHA has been an organization in transition. Through this transition, many individual circumstances needed to be considered. New policies are currently under development to provide more specific direction to front-line staff with regard to collection of rent and arrears.*

Management also wishes to note that new strategies specifically targeted at stemming the occurrence of arrears and to assist in the collection of arrears, have been implemented. Most specifically, the Department has implemented the Federal Refund Set-Off Program, which enables the MHA to capture income tax and GST income for vacated rental arrears. The MHA's participation in the Set-Off Program was developed in 2001 (e.g. review of arrears files) and became operational in December 2001. In addition, in May 2001, the MHA established an Accounts Receivable office whose responsibilities include developing repayment plans for current and former tenants in arrears, processing claims on former tenants with arrears, and all actions related to the Refund Set-Off Program.

R31 We recommend that the quality assurance review process encompass collection practices, particularly in projects experiencing high arrears.

COMMENTS OF OFFICIALS

Expectations regarding the need for timely collection practices will be incorporated into the quality assurance review process.

7. DOES THE DEPARTMENT ADEQUATELY ENSURE THAT SPONSOR-MANAGED HOUSING PROJECTS ARE PERFORMING AS EXPECTED?

WHAT WE CONCLUDED

We concluded that the Department's analytical and assessment processes should be strengthened to provide a greater level of assurance that sponsor-managed housing projects are performing as expected and complying with their operating agreements.

We note that the Department's Portfolio Administration Branch (the Branch) was only established on April 1, 1999. At that time a manager and six portfolio officers were hired. Two more officers were hired in April 2000. In addition to its responsibilities regarding the sponsor-managed housing projects, the Branch must also manage the agreements for more than 300 housing projects transferred in 1998 from CMHC pursuant to the Social Housing Agreement. We recognize that, to date, these factors have had a significant impact on the Branch's ability to focus sufficient effort on the sponsor-managed portfolio.

We reached our conclusion by examining the following criteria:

7.1 Operating agreements should clearly define the roles and responsibilities of sponsors.
7.2 Compliance with the requirements of a sponsor group's operating agreement should be assessed.
7.3 An appropriate annual budgeting process should be in place.

For this question we limited our scope to the 34 sponsor-managed projects under the Urban and Rural Program.

WHAT WE FOUND

7.1 Recently Signed Operating Agreements More Clearly Define The Roles And Responsibilities Of Sponsors

Operating agreements are an effective means of ensuring both parties understand their obligations. Such agreements would typically describe administrative requirements, service standards, performance expectations, and reporting requirements. Agreements should be signed and dated and be consistent in form and content.

We found that agreements have varied in form and content over time. While many sponsors are operating under agreements dated prior to 1990, we noted that an agreement signed in 1997 included several useful provisions not found in older agreements that we examined. Additional provisions included: amending the agreement, remedial actions to the Department in situations of non-compliance, tenant selection, discrimination, and definitions explaining key terms such as annual adjusted income, basic shelter costs, rent-to-income scale, and income. We commend the Department for these enhancements and encourage them to seek opportunities to systematically reflect these enhancements in all sponsor agreements.

We also noted that while Operating Agreements do not include performance expectations, they refer to guidelines and directives issued periodically by MHRC. In practice this encompasses the Applications and Tenanting Manual and the Handbook for Sponsors. General practice expectations are reflected in these documents.

The Handbook for Sponsors was developed in 1998 and was originally forwarded to sponsor groups in draft form to solicit their feedback. However, the Handbook has not been updated since its introduction. As a result, it does not reflect subsequent changes to policies and practices.

R32 We recommend that the Department update the Handbook for Sponsors.

COMMENTS OF OFFICIALS

The Department will undertake to update the Handbook for Sponsors as part of the ongoing policy review process.

R33 We recommend that the Department develop an action plan for updating sponsor agreements. The action plan should encompass a reasonable time frame of from 5 to 10 years.

COMMENTS OF OFFICIALS

Management wishes to emphasize that this recommendation cannot be implemented by the Department unilaterally. Sponsor agreements do not make provision for subsequent updates or replacements. Accordingly, unless a sponsor is in breach of the agreement, negotiating a revised agreement would require the sponsor's consent and cooperation. However, in 1997, the Department adopted an approach to updating and improving sponsor agreements wherever possible. When new sponsor agreements are executed or amendments to existing agreements are requested by a sponsor, the Department will use the most recent version of the agreement as the basis for negotiation. The Department anticipates that over time opportunities will arise to update all sponsor agreements however the Department is not in a position to unilaterally terminate or replace existing agreements without cause.

7.2 The Need To More Effectively Assess Whether Sponsors Are Complying With Key Requirements In Their Operating Agreements.

When an organization enters into an agreement to receive services, it must ensure that the service provider complies with all elements of the contract. This is important to ensure full value is received for the expenditures made.

FIGURE 28

Key requirements in **Sponsor Operating Agreements** include:

Administrative requirements
- compliance with department policies and directives, including:
  - Applications and Tenanting Manual,
  - draft Handbook for Sponsors;
- maintaining adequate accounting records;
- submitting annual budgets.

Service standards
- remitting excess funds to department on a periodic basis;
- operating within budgeted total expenditures, unless otherwise approved in advance by the department.

Reporting requirements
- provision of periodic statements of revenue and expenditure with variance explanations;
- providing annual audited statements.

In our view, as illustrated in Figure 28, there are seven key requirements that are common to all Operating Agreements with sponsors. We found that the Department had a system in place to track compliance to the reporting requirements but that it did not have an effective process for the other key requirements.

The Department's Corporate Services Branch maintains a log to track the receipt of sponsors' quarterly financial statements and annual audited financial statements. While the log records which reports have been received, it only records the specific dates that the annual audited financial statements were received.

We found that the Department had received 33 of the 34 audited financial statements for the fiscal year ended March 31, 2000 and that most these statements were received on a timely basis.

We found the Department had, with one exception, received the quarterly financial statements from all sponsors during the fiscal year ended March 31, 2000. However, we could not determine whether these reports were received in a timely manner.

We are concerned about the lack of effective monitoring in the following six areas:

7.2.1 operational reviews (field visits).
7.2.2 expenditure balances.
7.2.3 excess funds.
7.2.4 audited financial statements.
7.2.5 auditors' management letters.
7.2.6 monitoring expectations.

7.2.1 Operational reviews (field visits) should be strengthened

Operational reviews consist of on-site visits at which the practices and performance of the sponsor group, in a number of functional areas, are reviewed and compared with Departmental expectations. These areas include:

- Board governance,
- Tenant management,

- Building maintenance,
- Purchasing practices,
- Financial management, and
- Human resource management.

Such reviews are important because they help determine whether sponsor groups are managing the housing projects to the standards desired by the Department and whether remedial action should be taken.

We identified a number of concerns in this area:

- Reviews should be conducted more frequently;
- Review questionnaire/guide should be more specific; and
- Concerns should be followed up.

Reviews should be conducted more frequently

Since April 1999, operational reviews have not been conducted. Branch officials indicated that one of their key priorities since April 1999 was to focus on the needs of the more than 300 housing projects transferred from CMHC pursuant to the Social Housing Agreement. As a result, on-site operational reviews were deferred and contact with the sponsor groups was primarily by telephone call and written correspondence.

In December 2000 the Department developed an operational review plan. The plan scheduled 13 reviews to the end of 2003/04. Given that there are 52 sponsor-managed housing projects, at this pace it would take 13 years to review all the projects. In our view, this is not a sufficiently aggressive plan.

Management referred to a risk based approach, but the decision-making process and the rationale for the inclusion or exclusion of housing projects was not documented. We agree that a risk based approach to selecting projects or determining review scope is a valuable approach, however, it should not preclude the review, in varying degrees of detail, of all projects within a reasonable timeframe.

Review questionnaire should be more specific

We noted that staff, when conducting operational reviews, used an operational review questionnaire. We noted that the review questionnaire is generally aligned with the main functional areas discussed in the Handbook for Sponsors. While the questionnaire was very useful in helping staff structure their reviews, in our view, it was not sufficiently detailed to ensure that a consistently rigorous process of inquiry, document examination and analysis would occur.

Concerns identified should be followed up

The follow-up of issues in a timely manner is a key aspect of an operational review. An action plan should identify the key steps to be taken, the time frame for completion, and assign tasks to individuals.

We examined the results of the four most recent operational reviews conducted by MHA. (Prior to April 1999, operational reviews were conducted by MHA.) One operational review was conducted in 1998, two were conducted in 1996 and one in 1995. These reviews raised a number of issues including:

- the need for major capital work;
- missing documents (certified copies of Income Tax Return and Unit Condition Reports);
- deficiencies in the purchasing and payment system and practices; and
- lack of formal maintenance plans.

In the four files we examined we did not find any action plans to address the above issues. Officials indicated that they did not know whether the issues were resolved.

We also noted that the operational review questionnaire did not include a section on follow-up work to be conducted.

In addition, we believe it would also be useful to centrally aggregate the identified issues. This would assist in identifying common or systemic issues.

R34 We recommend that the Department develop a 3-5 year operational review plan that includes all sponsor-managed projects. We also recommend that the risk based approach and decisions be documented.

COMMENTS OF OFFICIALS

The Department will explore this recommendation. Each Portfolio Officer administers approximately 50 sponsor/non-profit agreements and has to be familiar with each project and communicate with the responsible group. Department staff maintain a close working relationship with the projects they are responsible for. Management believes that such ongoing monitoring, combined with regular reporting requirements, serves to identify those projects for which a detailed operational review may be warranted, thereby supporting the risk-based approach to conducting operational reviews. Documentation of the risk based approach and the selection of projects for monitoring will be enhanced.

R35 We recommend that the Department further develop its operational review questionnaire for sponsor-managed projects and that the questionnaire include subsequent follow up procedures.

COMMENTS OF OFFICIALS

The Department utilizes the operational review questionnaire developed by Canada Mortgage and Housing Corporation (CMHC), which is consistent with several other jurisdictions across Canada. Follow-up procedures are in place for all operational reviews conducted by the Department. These procedures will be documented and included as a section of the operational review questionnaire.

Provincially-owned motel style complex in Selkirk.

7.2.2 The department should take timely action regarding potential over-expenditures.

The Operating Agreements state that budgeted expenditure estimates are not to be exceeded without written approval of the Department.

We found that eight of the 34 (24%) sponsors-managed projects had exceeded their budgeted expenditures for the year ended March 31, 2000 by a total of approximately $120,000. Two of these sponsors had exceeded their budgets by amounts exceeding $30,000 each. Prior approval by the Department had not been obtained for any of these eight instances.

In order to provide timely approvals for budget amendments, sponsors and the Department need to be proactive in monitoring the financial and operational results of the housing projects. However, officials advised that they typically deferred extensive analysis of sponsor results until well after the end of a sponsor's fiscal year, but that they endeavoured to maintain an awareness of sponsor activities during the year.

In our view the Department should strengthen its ongoing analysis of sponsor financial results to help prevent expenditure overruns. We noted that neither the sponsors nor the Department were projecting second quarter results to the end of the fiscal year. Projections, when compared to the approved budgets, could help detect potential significant variances or budget overruns and trigger the needed corrective actions. Such actions could include reallocating resources within the housing project or the submission of a revised estimate for timely review and approval by the Department.

R36 We recommend that the Department include, as part of the sponsors' reporting requirements, financial projections based on second and third quarter results, with estimated variances, action plans and budget amendment requests.

COMMENTS OF OFFICIALS

The current quarterly reporting process for all sponsor projects provides year-to-date actual vs. budget financial information which, together with the ongoing contact between Portfolio Officers and project sponsors, provides quality information regarding the project's financial status and significant variances. The sponsor groups as a whole are expected to operate within the budget constraints. The Department is, however, prepared to implement the recommendation to further enhance the information received.

7.2.3 The Department should ensure that excess funds are remitted by sponsors on a regular basis during the year.

Sponsors collect revenues directly from tenants and use these funds to pay discretionary operating expenses such as administration, maintenance, utility, and appliance replacement. The Department is responsible for the payment of all non-discretionary operating expenses such as property taxes, mortgage interest, property insurance, as well as major repairs. Sponsors can maintain a cash balance equal to one month's discretionary operating expenses but are required to remit any excess funds on a timely basis to the Department.

We found that the Department was not sufficiently diligent in ensuring that sponsors remitted excess cash balances in a timely manner. We examined the annual analysis prepared by the Department of cash balances held by the sponsor groups as at March 31, 2000. We found three sponsors with excess cash balances totalling approximately $323,000 (ranging from $54,000 to $193,000). We noted that the sponsors were allowed to retain these excess funds a full year.

We also noted that during the period from June 1 to December 31, 2000 another sponsor accumulated excess funds of approximately $82,000 and had not remitted any excess funds during this time period. In January 2001 the sponsor remitted $80,000.

7.2.4 Audited financial statements should be reviewed on a more timely basis

Audited financial statements are a useful source of information because they provide the Department with assurance that the revenues, expenditures, assets and liabilities recorded by sponsor groups are complete and accurate and that appropriate accounting policies have been followed.

We noted that audited financial statement balances were reflected in the budget preparation document prepared by the Department. We found, however, that the audited statements were typically not reviewed as part of the budget process.

For the year ended March 31, 2000, we examined the results of nine annual reviews and found that only one review was substantially completed by July 31, 2000. The audited financial statements for this sponsor were received in May 2000.

For the remaining eight sponsors, reviews of the audited financial statements were not completed until December 2000 or January 2001, even though most of the audited financial statements had been received by the end of May 2000. We also noted that for five sponsors, these reviews related to the operations of two fiscal years - March 31, 1999 and March 31, 2000.

As was noted for Operational Review, we also think it would be useful to centrally aggregate the results of year-end financial statement reviews. This would help the Department identify common areas of concern.

R37 We recommend that the review of audited financial statements of sponsor-managed projects be included in the budget preparation process.

COMMENTS OF OFFICIALS

The Department has always used the audited financial statement information as part of the budget preparation process. Financial statement information for all sponsors is entered into the general ledger prior to budget preparation. The last three years of operating results are used as historical information and, accordingly, represent factors used to develop the budget. The audited financial statement and current reporting results may also be referenced where required. The Department agrees to explore this recommendation further.

7.2.5 Auditors' management letters should be obtained and reviewed

A useful product of an audit engagement is a letter from the auditor that highlights financial and administrative weaknesses. Such letters are usually referred to as "management letters".

While the department ensured that audited financial statements are received on time, it did not ensure that all management letters were received as well. Officials advised that they received management letters on less than half of their portfolio of projects. As a result, officials may not be aware of valuable information that would assist them in assessing sponsor performance and in safeguarding public assets.

We note that operating agreements do not require that sponsors submit management letters. We were advised that in 2000 the Department implemented a policy, effective March 31, 2001, requiring that sponsors submit management letters as part of the year end documents provided to the Department.

7.2.6 Monitoring expectations should be clearly stated

Guidance regarding monitoring expectations help ensure that monitoring procedures are applied on a consistent basis by all staff. Such guidance would include:

- ensuring information is in accordance with required formats, is mathematically correct, and appears reasonable;
- identifying significant variances and evaluating explanations;
- reviewing the monthly working capital requirements and the periodic transfer of cash balances to the Department;
- ascertaining the reasonableness of budget assumptions in light of current performance;
- reviewing waiting lists, vacancies, rental arrears and turnovers to assess the future impact on operations; and
- reporting the results of quarterly reviews to Department management.

Management advised that staff are expected to follow CMHC guidelines and procedures regarding monitoring of sponsor agreements. We noted that these guidelines provide direction on annual activities such as financial statement reviews and budget preparation; periodic activities such as mortgage renewals and inspections; and other required activities, such as operational reviews. Documented guidance for the quarterly monitoring of performance is not included in the CMHC guidelines.

R38 We recommend that guidelines be developed to assist staff in the quarterly review of operational performance and cash balances.

COMMENTS OF OFFICIALS

Quarterly monitoring is not required under the federal/provincial program guidelines for administering sponsor agreements; however, the department has been undertaking quarterly reviews. Documentation of quarterly monitoring and review procedures will be developed.

7.3 The Need To Further Strengthen The Budgeting Process

Budgets are management's best estimate of its financial commitment for the next year, and are a key expenditure control tool. Budgets should be developed from a review of historical and ongoing cost data as well as realistic assumptions regarding future revenues and expenditures. When multiple staff prepare budgets for a number of organizations, care must be taken to ensure consistency in assumptions, analysis, use of historical data and documentation of decisions. Consistency can be facilitated through guidelines or checklists.

Department staff prepare and approve sponsor operating budgets yearly. Sponsor responsibilities are limited to reviewing the preliminary budgets and providing input in the development of the discretionary cost components, namely administration, maintenance, utility, and appliance replacement costs. Department staff typically finalize budgets in August or September preceding the budget year and advise sponsors by providing them with letters and copies of the approved budgets.

We are concerned about the lack of:

7.3.1 documentation to support budgeting decisions, and
7.3.2 reviews and approvals of sponsor budgets by Department management.

7.3.1 Documentation to support budgeting decisions should be improved

We found that the files did not contain sufficient information to indicate the specific work that was done by staff and the results of the analyses and conclusions reached. Staff indicated that they were all using similar budget preparation procedures which included: review of prior years' revenue and expenditures, comparison of actual expenditures to standard costs for administration and maintenance costs, review for prior years extraordinary items, and consultation and feedback with sponsor-management during the budget review process. We believe that a budget preparation checklist would assist staff in developing budgets, aid in generating sufficient file documentation, and serve as a reminder to staff to ensure all critical steps are conducted.

R39 We recommend that the Department develop a budget preparation checklist for sponsor-managed projects.

COMMENTS OF OFFICIALS

Management wishes to advise that the Department has an established process for the development of program budgets, which includes the issuing of annual instructions. This approach extends to the development of individual sponsor budgets, with further instructions provided to all sponsors. Staff follow a consistent and detailed approach to reviewing sponsor-prepared budgets, including utilizing established budget benchmarks. The Department recognizes that a budget preparation checklist may serve as a reminder to staff and assist in generating file documentation.

7.3.2 Department Management should review and approve certain sponsor budgets

We found that Department management approves the overall sponsor-managed program budget but does not approve any of the individual sponsor budgets. While we were advised that sponsor budgets were finalized in consultation with Department management, notes on the nature of these discussions were not maintained.

In an environment of limited resources, it is imperative that proposed budgets be subject to significant challenge. We believe that management should approve sponsor budgets when it has been determined that a greater risk exists relative to other housing projects, such as when the budget has increased over a certain dollar amount, the project has a history of poor performance, or cost standards are being exceeded.

For example, in our sample of eleven sponsors, we found eight instances where budgeted costs exceeded per unit standard costs. However, because of limited documentation of the review and discussion process, we were unable to determine whether management was appropriately informed.

R40 We recommend that the Department amend its budgeting process for sponsor-managed projects to require approval by the manager of the Portfolio Administration Branch when predetermined risk conditions exist within the proposed budget.

COMMENTS OF OFFICIALS

Management wishes to advise that individual sponsor budgets are reviewed/amended by portfolio staff, and to management prior to being incorporated into the overall program budget. Notes are provided and discussion occurs on any unplanned increase in the requested budget, even if the increase is within the established benchmarks. This is necessary to allow management to prepare explanations for changes in overall program budgets lines. Formal acknowledgement of the review on projects where pre-determined risk conditions exist will be included in the budget review.

Provincially-owned low-rise apartment in Selkirk.

ASSINIBOINE COMMUNITY COLLEGE

Investment in Information Technology

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As with most organizations, the implementation of effective IT is playing an increasingly significant role at the College. IT supports the efficient and effective administration of the College. It also supports and enhances the learning experience of students.

We acknowledge the efforts of the College in managing its IT activities within the funding levels provided and with a concern for efficiency and effectiveness. Nonetheless, we identified several areas that would benefit from increased diligence. A primary need is for the development of a multi-year IT strategic plan. While it costs time and money to develop and implement such a plan, I believe that in the long run, the benefits outweigh the costs. If properly developed, a multi-year IT strategic plan would provide the essential link between the College's strategic plan and the CIS department's annual operating plan. The process of developing the plan will help the College make some of the difficult choices necessary to ensure maximum benefit from limited resources.

In addition, there is a need for more defined and documented policies and processes for supporting the technological infrastructure, for managing change and assistance requests, for supporting purchasing decisions and for continuing to ensure the security of its information and systems. These are important areas in which we believe the College would benefit by building more rigor and accountability into its existing processes.

Jon W. Singleton, CA•CISA

Report Summary

ABOUT THE COLLEGE

Assiniboine Community College operates under the authority of The Colleges and Consequential Amendments Act and is a self-governing institution with a government appointed Board of Directors.

The College offers over 30 diploma and certificate programs in the areas of Agriculture and Rural Enterprise, Business and Tourism, Health and Human Services, Information technologies, and Trades. Of particular note, the College has the provincial mandate for agricultural training and practical nursing.

The College primarily serves communities across south-western Manitoba with a main campus in Brandon, a satellite campus in Dauphin, and training centres at Russell, Neepawa, Swan River, and in Winnipeg's Misericordia Health Centre. Approximately 200 full-time and 400 part-time academic and administrative staff provide education services to approximately 1,900 full-time students. In addition, the College provides training to approximately 130 distance education students, 500 apprenticeship students, 5,200 continuing education program participants, and 350 contract training program participants. The expenditure budget for 2001/02 was $23.0 million. Revenues include Provincial grants of $15.7 million.

REASON FOR THE AUDIT

All organizations that rely in whole or in part on public funding need to maximize the value obtained from every dollar spent. Expenditures on information technology (IT) are no exception. We chose to conduct a value-for-money audit on the Assiniboine Community College's investment in information technology because it represents a significant annual investment and has a significant impact on College operations.

AUDIT PURPOSE, SCOPE AND APPROACH

The purpose of our audit was to answer the following four questions:

1. Is the College making sufficient progress in achieving its information technology objectives?
2. Are information technology systems and services adequately meeting the needs of users?
3. Are information technology purchases made with due regard for economy and effectiveness?
4. Is the College taking appropriate action to minimize the risk of unauthorized access to its computer networks?

Our examination was performed in accordance with value-for-money auditing standards recommended by the Canadian Institute of Chartered Accountants, and accordingly included such tests and other procedures as we considered necessary in the circumstances. Audit procedures were substantially performed during the period June 2001 through October 2001.

IMPORTANT CONSIDERATIONS

Our research indicates that the demands on IT departments at colleges and universities across Canada may be overwhelming. This situation results from several factors including the following:

- The transition from a mainframe based computing environment to the rapidly changing microcomputer based environment has increased the nature and demand for services needed by users.
- Today, almost all faculty, administrative staff and students are users of IT resources and services. Previously, only fractions of these groups were users.
- Colleges and universities face challenges in staffing IT positions. These challenges include fewer graduates in computer-related fields, lack of competitive salaries in the higher education environment, and increasing market demand for information technology skills.

We believe these factors have also had an impact on Assiniboine Community College.

Another factor that challenged the College was the acquisition of a new financial and student information system in 1996. The implementation of this new system has been the Computer and Information Service (CIS) Department's focus for the last few years.

CONCLUSIONS AND KEY FINDINGS

In this section we conclude on each of our four audit questions and briefly discuss our key findings. In addition, each key finding is accompanied by our recommendations and the College's response. Our detailed report includes 24 recommendations, 12 are noted in this report summary.

1. IS THE COLLEGE MAKING SUFFICIENT PROGRESS IN ACHIEVING ITS INFORMATION TECHNOLOGY OBJECTIVES?

We concluded that because the College had not developed performance measures for each of the four IT objectives included in the College's Strategic Plan, the degree to which these objectives were being met could not be determined. While we also concluded that the CIS Department's 2000/01 Operational Plan was not clearly aligned with the College's Strategic Plan, we noted that many of the tasks associated with the CIS Department's 2000/01 Operational Plan had been accomplished.

Our key findings are discussed in brief below.

The Need for a Multi-Year IT Strategic Plan

The CIS Department did not develop a multi year strategic IT plan. If properly structured, such a plan would explicitly build on the IT objectives included in the College's Strategic Plan by specifying the related IT initiatives to be accomplished over a number of years.

We believe that a multi-year strategic plan would have contributed to a clearer alignment between the CIS Department's 2000/01 Operational Plan and the College's Strategic Plan.

We recommend that the CIS Department develop a multi-year Strategic IT Plan that builds on the IT objectives in the College's Strategic Plan. R1

College Response
The College as a whole and the IT Department support and understand the importance of good short and long-term (strategic) planning.

We believe that our greatest shortfall in the area of planning may be in the production of easily accessible detailed and consolidated strategic planning documents.

We want to move in the direction of better documented plans, but in so doing we are not likely to allocate new resources or reallocate existing resources.

The Need for Performance Measures in the College's Strategic Plan

We found that performance measures had not been developed for the IT related objectives included in the College's Strategic Plan. As such the College was not in a position to determine whether the CIS Department had met the performance expectations contemplated by management when the June 1999 Strategic Plan was prepared.

We recommend that the College develop performance measures to assess progress towards achieving the objectives set out in the Strategic Plan. R4

College Response
The College's move to better documented plans will be done in a manner that addresses the need for performance measures.

Many of the Tasks Associated with the CIS Department's Operational Plan Have Been Accomplished

We determined that the CIS Department had successfully completed 17 of the 23 tasks associated with its 2000/01 Operational Plan.

Other Findings

Other findings included in the detailed report deal with the need to:

- Clearly link the CIS Department's Operational Plan to a longer term IT plan.
- Expand the CIS Department's Operational Plan to include the specific tasks to be accomplished during the year, the staffing and other resources required, and timelines for completion.

2. ARE INFORMATION TECHNOLOGY SYSTEMS AND SERVICES ADEQUATELY MEETING THE NEEDS OF USERS?

We concluded that while College staff believe that systems and services have improved over the last two years, additional system and service enhancements are required to ensure that:

- **staff are satisfied with the nature and quality of information available;**
- **staff and students can rely on the technology;**
- **staff and students have timely access to assistance; and**
- **staff and students have access to the IT training they require.**

Our key findings are discussed in brief below.

The Need to Ensure Users are Satisfied with the Nature and Quality of Information and Reports

In our view, one of the best measures for the adequacy of information generated is the level of user satisfaction. As such, we conducted a staff satisfaction survey. Survey responses indicated that the College should continue pursuing improvements to the information and reports generated by its information systems. As an example, information and reports generated by the student information system were cited by many staff as cumbersome and difficult to obtain.

We recommend that the College continue to improve the relevance, timeliness and accuracy of reports and information available from the College's financial and student systems. R5

College Response
The College continues to work on this recommendation. Since completion of the audit the College has made significant progress in the production of reports that help managers make informed decisions. We still have much work to do in this area, however, improved reporting from the MIS remains a priority for the College.

The Need to Define and Monitor Service Levels

We found that the College had not defined expected service levels, nor was it tracking actual service levels achieved. As a consequence, the College was unable to objectively assess the adequacy of the levels of service achieved by the CIS Department.

We recommend that senior management define the expected service levels to be provided by the CIS Department, and communicate these service levels to users. R6

College Response
We see value in this for both the CIS Department and our customers. It will provide benchmarks for IT staff and will inform the customer what they may expect. It will also help when dealing with the difficult customer whose expectations are beyond the service level provided by the College.

The Need to Manage Requests For Changes to Systems and Reports

We found that the CIS Department did not have a defined process in place for managing requests for changes to systems and reports. We noted three areas of concern, namely:

- requests for assistance were not documented;
- service request priorities were not established; and
- user sign-offs were not obtained when service projects were completed.

We recommend that the CIS Department strengthen their process for managing requests for changes to systems or reports. R8

College Response
We agree. The process around the operation of our recently implemented help desk will significantly strengthen the process for managing requests for changes to systems or reports.

The Need to Develop and Document Standards and Procedures for Supporting the Technological Infrastructure

We found that the CIS Department had no documented procedures and standards for supporting the technological infrastructure. Staff relied on verbal communication regarding the support needed, and their knowledge of the hardware and software components that make up the infrastructure.

We recommend that the CIS Department establish and document minimum standards and procedures for supporting the technological infrastructure. R9

College Response
We support this recommendation. Since this audit was completed, progress has been made in this area. However, further progress will take considerable time without dedicated resources.

The College puts itself at some risk related to system failures without this documentation in place. However, as progress continues to be made it continually reduces future risks.

The Need for a Help Desk

We found that the CIS Department did not provide assistance through an established help desk function. We were advised that when staff need assistance, they contact the CIS Department and IT staff respond as available. In our survey, seventy-six percent (76%) of staff agreed that a "dedicated help desk" was needed to provide "fast help" to both staff and students regarding computer hardware and application software problems. The most common suggestion was that technical help should be more available.

We recommend that the College establish a "help desk" to better meet the assistance needs of both students and staff. R11

College Response
This is something the College has wanted to resource for the past few years. We are pleased that through a retirement we were able to re-allocate resources to staff such a desk. This desk was setup in September 2002.

Other Findings

Other findings included in the detailed report deal with the need to:

- Monitor the actual service levels achieved;
- Develop policies and procedures for operating the IT Inventory System;
- Develop documentation requirements and prioritization guidelines for assistance requests received; and identify, track, and report outcome-oriented performance measures for the CIS Department's assistance activity; and
- Conduct a more detailed assessment of the IT training needs of staff.

3. ARE INFORMATION TECHNOLOGY PURCHASES MADE WITH DUE REGARD FOR ECONOMY AND EFFECTIVENESS?

We concluded that the College's IT purchases for 2000/01 were made with due regard for economy and effectiveness.

Our key findings are discussed in brief below.

The Technological Infrastructure is Standardized to an Appropriate Extent

We found that the main elements of the IT infrastructure at the College, including computers, monitors, printers and software, were standardized to an appropriate extent.

We noted that the CIS Department developed minimum requirements for computers and other IT equipment. We found that all of the main hardware components connected to the network met or exceeded the College's minimum standards.

We examined computer purchases in 2000/01 and found that they met these specifications and were compatible with the existing technological infrastructure.

The Need to Appropriately Document Bid Analyses and the Rationale for Purchasing Decisions Made

For the 15 purchases tendered in 2000/01, we found that a minimum of four bids had been received for each tender. However, we noted that bid analyses were not documented. Documenting bid analyses would help demonstrate that the "best supplier" was selected without prejudice, and would help protect the College if the selection process was ever challenged or questioned. We re-performed the bid analyses and determined that, for each tender awarded, the CIS Department had selected the most economical vendor that met all of the selection criteria.

We recommend that the CIS Department prepare and retain documentation of the analysis of quotations and the rationale for vendor selection decisions. R15

College Response
This is another case where current practices and procedures are very good - but we should have documentation. We ultimately want to meet this recommendation, but there are many recommendations that are of a higher priority.

Other Findings

Other findings included in the detailed report deal with the need to:

- Document IT purchasing policies and procedures; and
- Post tenders for purchases greater than $100,000 on MERX.

4. IS THE COLLEGE TAKING APPROPRIATE ACTION TO MINIMIZE THE RISK OF UNAUTHORIZED ACCESS TO ITS COMPUTER NETWORKS?

We observed that many actions to promote appropriate security have been taken and acknowledge the awareness and concern by the CIS Department for adequate security. However, the College's increasing reliance on technology and the use of the Internet have significantly increased the security risks faced by the College. In light of this environment, we concluded that the College should take additional actions to minimize the risk of unauthorized access to its computer networks.

Our key findings are discussed in brief below.

The Need for Periodic Security Reviews

We noted that the College had not recently performed a formal security review. While a security review cannot identify all possible threats and security risks, it can provide valuable information that can be used to significantly reduce security risks.

We recommend that the College periodically assess the adequacy of its IT security measures. R17

College Response
The College will continue to perform ongoing assessments. Because of time and resource constraints, these are often informal with limited documentation.

The Need to Monitor Access Attempts and Internet Usage

We found that the College had not activated the log preparation features of its various software programs and as such had not reviewed access attempts or Internet usage. The preparation and review of these logs is central to detecting unauthorized access attempts or identifying inappropriate use of the Internet.

We recommend that the College monitor for unauthorized network access attempts and Internet usage. R21

College Response
The College is confident that unauthorized access is extremely difficult, but will continue to search for cost-effective software to monitor both these issues.

The Need to Ensure the Infrastructure Configuration Better Promotes a Secure Environment

We identified several opportunities to decrease the risk of unauthorized access to College systems. These were brought to management's attention in a separate report. Among the issues reported was the need to better segregate internal networks. Publicly accessible servers, including Web Servers, are connected directly to the College's internal network. This connection increases the risk of unauthorized access. Publicly accessible servers should be placed on a separate service network inside the firewall.

We recommend that the College better segregate its internal network from publicly accessible servers. R22

College Response
The College considers its current method to provide adequate security in a cost effective manner. Although full implementation of this recommendation would give the appearance of greater security, it would likely cost considerably more than our current system. Further consideration will be given to this recommendation if and when more funds become available.

The Need to Develop and Communicate Security Policies and Procedures

We found that the College had not developed comprehensive security policies. In this report, we identified a number of areas where security could be strengthened. These areas should be supported by appropriate policies and procedures.

We recommend that the College develop and implement policies and procedures to promote a sufficiently secure IT environment. R23

College Response
Agree with the recommendation. However, implementation will have to be phased in as resources can be made available. Small steps may be taken that move us in the general direction of the recommendation.

Other Findings

Other findings included in the detailed report deal with the need to:

- Encrypt sensitive information when transmitting between locations;
- Strengthen the password controls by educating all users on the importance of using more complex passwords;
- Set up a separate shared directory for student assignments so instructors do not need to access student accounts; and
- Develop and implement a security awareness program for all staff and students.

Introduction

All organizations that rely in whole or in part on public funding need to maximize the value obtained from every dollar spent. Expenditures on information technology (IT) are no exception.

Investments in information technology that are clearly linked to organizational goals can increase an organization's ability to operate in an efficient, effective and economic manner. Within a community college environment, information technology can offer critical support to staff and students for administrative functions such as tracking student records. Also, with access to the Internet, staff members can share leading-edge information with their contemporaries and students can conduct research, thereby enhancing the overall learning environment of the college. In addition, the use of technology for distance education offers the potential for a college to reach students that may not otherwise be able to take college courses without leaving their communities.

We chose to conduct a value-for-money audit on Assiniboine Community College's investment in information technology because it represents a significant annual investment and has a significant impact on College operations. The effective and efficient use of information technology is a key success factor if the College is to achieve its mission and goals.

About the College

HISTORY AND ORGANIZATION OF THE COLLEGE

Assiniboine Community College started operations in Brandon in 1961 under the direction of the Department of Education. In 1993, under The Colleges and Consequential Amendments Act, the College became a self-governing institution with a government appointed Board of Directors.

The College's purpose is set out in its mission statement:

Assiniboine Community College
Mission Statement

Assiniboine Community College is a progressive post-secondary institution that provides individuals with knowledge, skills and credentials that are highly valued in the

In order to meet its mission, the College is committed to the following goals:

- to promote student success;
- to increase College enrolment to meet student and labour market demands;
- to employ sound business practices and efficient and effective administrative systems; and
- to foster a healthy and respectful workplace and learning environment.

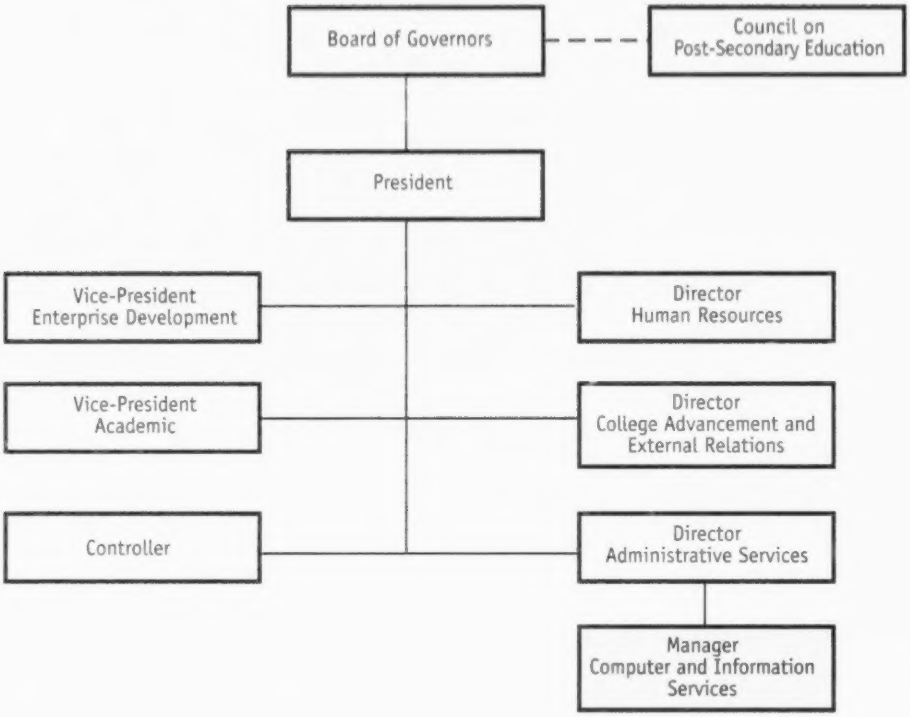
The College offers over 30 diploma and certificate programs in the areas of Agriculture and Rural Enterprise, Business and Tourism, Health and Human Services, Information technologies, and Trades. Of particular note, the College has the provincial mandate for agricultural training and practical nursing.

The College primarily serves communities across south-western Manitoba with a main campus in Brandon, a satellite campus in Dauphin, and training centres at Russell, Neepawa, Swan River, and in Winnipeg's Misericordia Health Centre. Approximately 200 full-time and 400 part-time academic and administrative staff provide education services to approximately 1,900 full-time students. In addition, the College provides training to approximately 130 distance education students, 500 apprenticeship students, 5,200 continuing education program participants, and 350 contract training program participants. The expenditure budget for 2001/02 is $23.0 million. Revenues include Provincial grants of $15.7 million.

As reflected in Figure 1, the College is organized into 6 divisions, each reporting to the President. For this value-for-money audit, we focused primarily on the Computer and Information Services Department (CIS Department), part of the College's Administrative Services Division.

FIGURE 1

College Organization Chart as at June 30, 2001


Board of Governors
Council on Post-Secondary Education
President
Vice-President Enterprise Development
Director Human Resources
Vice-President Academic
Director College Advancement and External Relations
Controller
Director Administrative Services
Manager Computer and Information Services

COMPUTER AND INFORMATION SERVICES DEPARTMENT

Mandate and Mission

The CIS Department recently developed both a mandate and a mission statement to help guide Department activities:

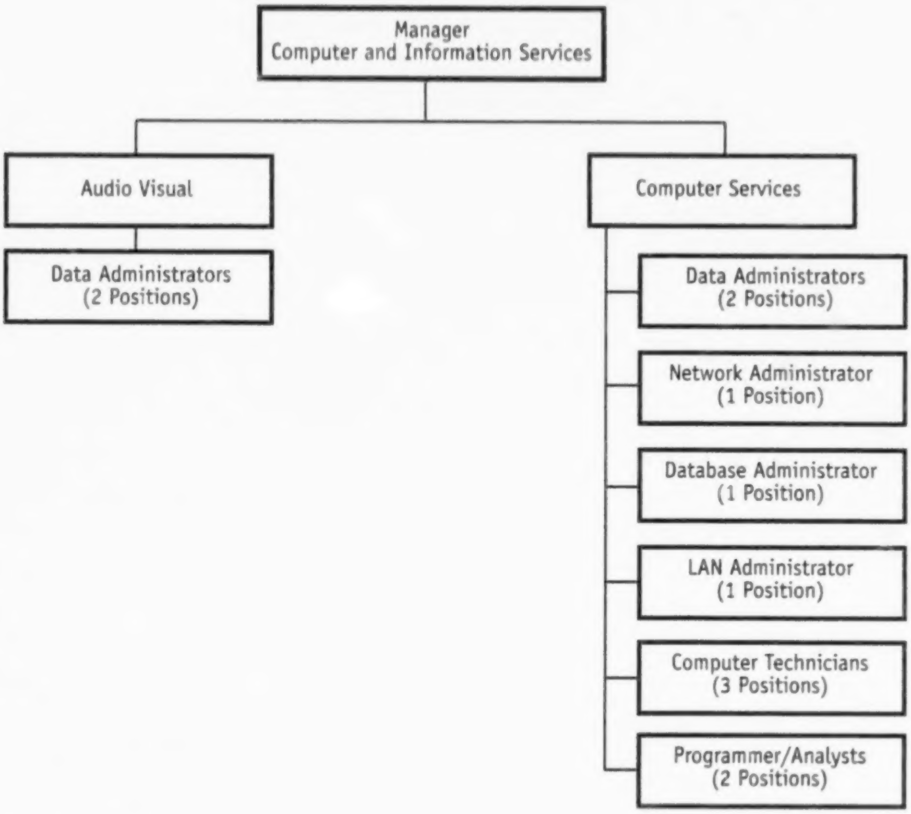
- Mandate – Maintain the College's electronic network of tools.
- Mission – Make sure our services are cost-effective and not a bottleneck to the business of the College.

Organizational Structure

The Manager, Computer and Information Services joined the College in December 1997 and manages a complement of 12 staff positions as shown in Figure 2.

FIGURE 2

Computer and Information Services as at June 30, 2001



Services Provided

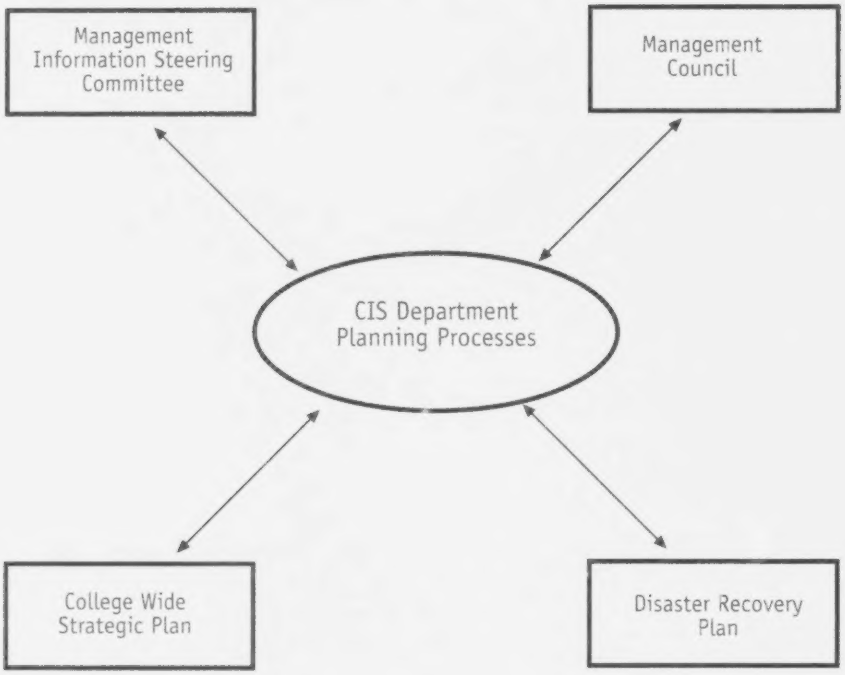
Planning

The CIS Department advises senior management on how IT can support the overall direction and strategic plan of the College. The CIS Department also participates on the Management Information System Steering Committee and the College's Management Council. Both of these Committees are important components of the College's planning and management processes. Specific IT objectives are set out in the College's Strategic Plan and the CIS Department's Operational Plan.

When the new Management and Student Information System (MIS) was purchased in 1996, the College established an Implementation Project Team to oversee the implementation of the various applications and modules of the system, identify project steps, hold detailed project status meetings, evaluate accomplishments and recommend necessary changes. Following the initial implementation, the Implementation Project Team evolved into the MIS Steering Committee. The MIS Steering Committee was charged with providing ongoing review of the operation of the MIS including planning and monitoring the system improvement initiatives.

FIGURE 3

CIS Department Planning Inputs


Management Information Steering Committee
Management Council
CIS Department Planning Processes
College Wide Strategic Plan
Disaster Recovery Plan

Computer Services and Networks

The CIS Department acquires, installs, and maintains computers and software for academic and administrative users. In addition, the CIS Department designs, implements, operates, and secures the College's computer networks for Internet access, distance learning and certain administrative applications.

Client services

The CIS Department provides day-to-day assistance to staff to help them with any problems they may be having with College systems, computers, and other IT equipment such as printers and scanners. The CIS Department also supports academic staff by helping them to integrate computer applications and educational software into academic programming.

The CIS Department provides limited technical support to students. Generally, students do not contact the CIS Department directly, but will seek assistance from their instructors. If their instructor cannot help them, the instructor will contact the CIS Department on the student's behalf.

Statistical Information

Figure 4 shows a summary of IT expenditures and staffing information.

FIGURE 4

Summary of IT Expenditures and Staffing

	Actual		Budget 2001/02	% Change 2000/01 to 2001/02
	1999/00	2000/01		
CIS Department				
Number of staff positions	15	14	13	
Salaries and staff benefits	$ 604,300	$ 632,500	$ 572,700	(9.4)
Software licenses and fees	136,100	174,600	159,000	(8.9)
Communications	23,700	34,800	39,400	13.2
Travel	15,700	15,100	17,400	15.2
Other	77,100	73,700	70,600	(4.2)
Other departments				
Software licenses and fees	52,100	47,100	51,400	9.1
Internet access	41,900	48,500	70,700	45.8
Other	47,500	53,500	53,300	(.3)
Total IT Operating	**$ 998,400**	**$ 1,079,800**	**$ 1,034,500**	**(4.2)**
IT Capital				
Major computer hardware and software	$ 757,500	$ 878,200	$ 643,600	(26.7)
Total IT Operating and Capital	**$ 1,755,900**	**$ 1,958,000**	**$ 1,678,100**	**(14.3)**
Total College Expenditures	**$19,342,000**	**$22,615,600**	**$24,191,600**	**7.0**
IT Operating and Capital as a Percent of Total College Expenditures	9.1%	8.7%	6.9%	

Source: College Records

SYSTEMS AND TECHNOLOGY

Information Systems

Financial and student information is provided, for the most part, by an integrated management information system. This commercial software was implemented in two phases, with the financial system installed in the fall of 1996 and the student system installed in the fall of 1998.

The system includes the following components:

Academic Records
Admissions
Accounts Payable
Accounts Receivable
Budget Management
Correspondence Control
Curriculum Development
Core System - Colleague
Cash Receipts
Degree Audit
Faculty Information
Fixed Assets
General Ledger
Inventory
Purchasing
Registrar
Sponsored Projects

Other information systems used by the College include:

- a library services system that provides students and staff with on-line access to the library's catalogue;
- a point of sale system for the book store that records sales and provides information on merchandise inventory; and
- personal productivity tools such as word processing, spreadsheets and e-mail.

In addition to the above noted information systems, the College uses the services of an external payroll service provider to prepare payrolls and to record individual staff payroll information.

Distance Education

Distance education technology is utilized by the College to deliver selected courses over the Internet. Students can transmit many of their assignments to instructors electronically, and can also participate in chat rooms, class mail lists or discussion boards. Through course content links, distance education students can also access the most current web sources for information and research.

Electronic Communications

The College maintains internal networks that are linked to the Internet. This structure provides the foundation for connecting all staff and students at its main campus in Brandon to its satellite campus in Dauphin, and to the community learning centres in Russell, Neepawa, Swan River and Winnipeg.

The College also maintains an Internet web site that offers information about the College, a staff directory and a course and program search feature.

Audit Purpose, Scope and Approach

The purpose of our audit was to answer the following four questions:

1. Is the College making sufficient progress in achieving its information technology objectives?
2. Are information technology systems and services adequately meeting the needs of users?
3. Are information technology purchases made with due regard for economy and effectiveness?
4. Is the College taking appropriate action to minimize the risk of unauthorized access to its computer networks?

Our audit included examining available records and conducting interviews of College officials, administrative staff and faculty. With respect to Question 2, we also surveyed a sample of College staff regarding their satisfaction with information technology and support services. With respect to Question 4, we obtained the services of a management consulting firm experienced in conducting security reviews. Audit procedures were substantially performed during the period June 2001 through October 2001.

Our examination was performed in accordance with value-for-money auditing standards recommended by the Canadian Institute of Chartered Accountants, and accordingly included such tests and other procedures as we considered necessary in the circumstances.

Important Considerations

Our research indicates that the demands on information technology departments at colleges and universities across Canada may be overwhelming. This situation results from several factors including the following:

- The transition from a mainframe based computing environment to the rapidly changing microcomputer based environment has increased the nature and demand for services needed by users.
- Today, almost all faculty, administrative staff and students are users of information technology resources and services. Previously, only fractions of these groups were users.
- Colleges and universities are delivering courses over networks, including the Internet, and are competing in the delivery of these services. Being able to offer such services requires current computer hardware and software that may be costly.
- Colleges and universities often purchase hardware and software on a piecemeal basis due to funding constraints. As a result, the systems are not standardized across the organization and are, therefore, complex to support.
- Colleges and universities face challenges in staffing information technology positions. These challenges include fewer graduates in computer-related fields, lack of competitive salaries in the higher education environment, and increasing market demand for information technology skills.
- The Internet "revolution" is resulting in the proliferation of personal computing devices and people wanting self-serve access to information from anywhere at any time. Colleges, like other organizations, are affected by this "revolution". The technological infrastructure of computers, networks and software has to be kept up-to-date. Information technology staff need to learn new technologies and stay competent in current ones in order to successfully implement technological changes. Information technology departments may face demands to provide support almost twenty-four hours a day.

We believe these factors have also had an impact on Assiniboine Community College.

There are also some unique factors that affect the IT services at the College. Prior to the appointment of the Manager, Computer and Information Services in 1997, the College had acquired a new financial and student information system. Implementation of this system was a major undertaking and much of the CIS Department's efforts have been focused on implementing this system.

In addition, the College has four widely dispersed regional learning centres and a separate satellite campus that places added demands on the College's financial resources allocated to IT.

While these factors have increased the challenges of managing the College's investment in information technology, our staff survey indicated that 80% of staff believe the service provided by the CIS Department improved in the last two years.

Detailed Findings and Recommendations

1. IS THE COLLEGE MAKING SUFFICIENT PROGRESS IN ACHIEVING ITS INFORMATION TECHNOLOGY OBJECTIVES?

WHAT WE CONCLUDED

We concluded that because the College had not developed performance measures for each of the four IT objectives included in the College's Strategic Plan, the degree to which these objectives were being met could not be determined. While we also concluded that the CIS Department's 2000/01 Operational Plan was not clearly aligned with the College's Strategic Plan, we noted that many of the tasks associated with the CIS Department's 2000/01 Operational Plan had been accomplished.

We reached this conclusion by examining the following criteria:

1.1 A multi-year IT strategic plan should be in place that links an IT department's annual operational plan to the strategic plan for the organization as a whole.

1.2 An annual IT operational plan should be in place that includes the specific tasks to be accomplished, the resources required to complete the tasks, and the timelines for completion.

1.3 Performance measures should be in place to help assess progress made in achieving strategic objectives.

1.4 Progress in achieving strategic objectives including operational plan initiatives should be monitored.

In determining what appropriate and practical planning processes should be, we referred to standards for managing information technology issued by the Canadian Institute of Chartered Accountants and the Information Systems Audit and Control Association.

WHAT WE FOUND

1.1 The Need for a Multi-Year Strategic IT Plan

A multi-year strategic IT plan is an essential planning document because an organization's strategic IT goals and related objectives can be broad in nature and require several years of effort to achieve. A multi-year strategic IT plan should detail the specific initiatives to be undertaken by an IT department, over a period of several years, to fulfill its objectives. As such, it provides vital direction for an IT department's annual operational plan. A multi-year strategic IT plan also communicates how IT initiatives contribute toward broader organizational strategies and goals. A multi-year strategic IT plan would include:

- a multi-year infrastructure plan that outlines the proposed enhancements and modifications to the existing infrastructure to help achieve the IT and business objectives set out in the organization's strategic plan; and
- a multi-year acquisition plan that outlines how an IT department intends to replace computers and other components that become obsolete or wear out.

A multi-year strategic IT plan would also describe the risks and lost opportunities associated with not proceeding with the various initiatives in the plan. This information is useful to assist management in evaluating funding requests because the merits of specific IT expenditures can be better evaluated against the relative merits of other proposed IT projects and of other competing organizational priorities.

In June 1999, the College conducted external and internal consultations and reviews, including "constituent planning forums" attended by approximately 150 participants from different sectors of the community. With this information, the College developed and approved a Strategic Plan that outlined the vision, mission, and strategic goals of the College. The Strategic Plan included four main College wide strategic goals supported by 30 objectives. Two of the College's strategic goals included objectives related directly to information technology (as shown in Figure 5). These four objectives were primarily assigned to the CIS Department.

FIGURE 5

Excerpt from the College's Strategic Plan

Strategic Goals	Related IT Objectives
To increase College enrolment to meet student and labour market demands.	1. Implement the student enrolment system to improve the efficiency and effectiveness of recruitment, enrolment and retention strategies.
To employ sound business practices and efficient and effective administrative systems.	2. Continue to support, enhance and fully utilize the integrated management information system. 3. Ensure fiscal responsibility and sound planning by enhancing financial reporting (providing timely and accurate information for managers and the Board). 4. Ensure an environment of technological currency, effectiveness and support.

College officials advised that they reviewed the Strategic Plan each year as part of the College's annual operational planning process. We noted that the Strategic Plan submitted to COPSE for 2000/01 reaffirmed the strategic goals and objectives approved in June 1999.

The CIS Department, however, did not develop a multi year strategic IT plan. If properly structured, such a plan would explicitly build on the IT objectives included in the College's Strategic Plan by specifying the related IT initiatives to be accomplished over a number of years. Consequently, we believe that the lack of a multi year strategic plan had an impact on the clarity with which the CIS Department's 2000/01 Operational Plan aligned with the College's Strategic Plan.

While we were told that the CIS Department's Operational Plan was based on the four IT related objectives set out in the College's Strategic Plan (Figure 5), we found that the Operational Plan made no specific reference to the IT related objectives discussed in the College's Strategic Plan. As a result, it was not particularly evident how the five objectives included in the Operational Plan (as detailed in Figure 6) aligned with the four IT objectives in the College's Strategic Plan.

R1 We recommend that the CIS Department develop a multi-year Strategic IT Plan that builds on the IT objectives in the College's Strategic Plan.

R2 We recommend that the CIS Department's Operational Plan be clearly linked to a longer term IT plan.

COLLEGE RESPONSE

See recommendation 4 for College response.

1.2 The Need to Include Sufficient Detail in the Operational Plan

An annual operational plan should itemize in appropriate detail the specific activities to be undertaken in the year and the resources needed.

We noted that the CIS Department's 2000/01 Operational Plan did not include the specific tasks associated with each of the five objectives listed (Figure 6). We found that the tasks were detailed in other planning documents such as the MIS Steering Committee Plan for 2000/01, the IT Capital Budget for 2000/01, and the most current version of the CIS Department's Disaster Recovery Plan. These planning documents identified 23 specific tasks to be accomplished in the 2000/01 year. We also noted that these planning documents assigned individuals to each task and established timelines for completion.

While we were able to link the tasks included in the supporting planning documents to each of the five key objectives in the CIS Department's Operational Plan (as illustrated in Figure 6), the Operational Plan could be strengthened by including the tasks, resources required, and timelines for completion. This would better communicate planned activities to both management and the Board.

R3 We recommend that the CIS Department's Operational Plan be expanded to include the specific tasks to be accomplished during the year, the staffing and other resources required, and timelines for completion.

COLLEGE RESPONSE

See recommendation 4 for College response.

1.3 The Need for Performance Measures in the College's Strategic Plan

While the College's Strategic Plan set out objectives for information technology, the Plan did not include specific performance measures to help assess the adequacy of progress made in achieving the objectives. For example, to help assess whether the College was achieving its objective of "an environment of technological currency, effectiveness, and support", performance measures would be needed for all three of the stated elements. Potential measures could include:

Currency

- Target time period to update systems for any new releases or updates to programs.
- Target productivity improvement measures such as time required to perform tasks.

Effectiveness

- Target levels for staff and student satisfaction with IT systems and services.

Support

- Target timeframes to respond to and address service requests from staff.

Because performance measures had not been developed for the IT related objectives included in the College's Strategic Plan, the College was not in a position to determine how well the CIS Department was meeting the performance expectations contemplated by management when the Strategic Plan was prepared.

R4 We recommend that the College develop performance measures to assess progress towards achieving the objectives set out in the Strategic Plan.

COLLEGE RESPONSE (RECOMMENDATIONS 1 TO 4 INCLUSIVE)

First, the College as a whole and the IT Department support and understand the importance of good short and long term (strategic) planning. The College and its IT department are continually involved in a variety of planning processes, some of which are quite complex. The audit reports a number of positive outcomes for the department (e.g., the department is generally meeting the IT hardware and software needs of the college community). These outcomes are the result of the multi-planning processes/exercises that are on-going.

We believe that our greatest short-fall in the area of planning may be in the production of easily accessible detailed and consolidated strategic planning documents. Although there is generally value in having detailed strategic planning documents we do not place a high value on such at the College. The reasons are as follows:

1. *Development of such documents are resource intensive – resources that we do not have. If we allocated existing resources to the development of such documents, it would mean fewer resources available to actually implement plans and provide much needed service and support to the college community.*
2. *We use a variety of planning processes, many of them informal and very much on-going. This seems to well suit the nature of our organization as well as its size.*
3. *We are a relatively small organization. It is easier to communicate informal plans in a smaller organization that it is in a larger one.*
4. *Although we have short and long term plans, it must be kept in mind that they are more dynamic than one would find in many government and private sectors. We are an organization that is rapidly changing and constantly evolving to meet ever-changing needs. On top of this, we are talking about technology that is transforming and changing at ever increasing paces.*

In general, we will want to move in the direction of better documented plans, but in so doing we are not likely to allocate new resources or reallocate existing resources.

1.4 Many of the Tasks Associated With the CIS Department's Operational Plan Have Been Accomplished

As previously discussed, the CIS Department identified 23 specific tasks to be accomplished during the 2000/01 year. We noted that the MIS Steering Committee played a key role in monitoring progress for 8 of the 23. The other 15 tasks were monitored by the Manager, Computer and Information Systems. Nine of these tasks were activities carried out under the Disaster Recovery Plan, one task related to a new Human Resource system, and the remaining five tasks were for operating system and hardware upgrades.

Based on our review of progress achieved, we determined that the CIS Department had successfully completed 17 of the 23 tasks targeted for completion in 2000/01. Of the remaining six tasks:

- significant progress had been made on two tasks;
- little progress had been made on two tasks;
- one task had been deferred; and
- one task had been terminated.

Our assessment of each of the 23 tasks is set out in Figure 6.

In assessing the status of the 23 tasks, we reviewed the work of the MIS Committee. In our view, the Committee provided valuable oversight.

When the new MIS System was purchased in 1996, the College established an Implementation Project Team to oversee the implementation of the various applications and modules of the system, identify project steps, hold detailed project status meetings, evaluate accomplishments and recommend necessary changes. Following the initial implementation, the Implementation Project Team evolved into the MIS Steering Committee.

At the time of our audit, the MIS Steering Committee represented both academic and administrative interests and was comprised of three College executives, three College managers, including the Manager, Computer and Information Services, and one programmer. In addition to the main committee, ad hoc committees reporting to the MIS Steering Committee were also used to plan and monitor more complex projects, such as Web Based Registration.

Initially, weekly meetings were held, but since September 2000 the MIS Steering Committee has met monthly. Formal minutes of their meetings and related decisions were prepared and copies of the minutes were provided to the President and to each of the Vice Presidents.

We reviewed the minutes and related work schedules from January 2000 to November 2001 and noted that:

- System priorities were identified at the beginning of each year. Projects were ranked as high, medium, or low priority.
- Minutes and work schedules indicated key staff assigned to lead each project, noted the status of the project, estimated the date of completion, and included other key information such as system changes and other tasks that needed to be completed to ensure the success of the project.
- At each meeting, the Committee reviewed the status of activities relating to the each project and approved any corrections or amendments to the original project that were required to keep the project on track.
- Required changes or additions to the list of projects or change in priorities of tasks were discussed and actions initiated as necessary.

In our view, the activities and decisions of the MIS Steering Committee represent a significant component of the College's overall IT planning process, in conjunction with the College's Strategic Plan and the CIS Department's Operational Plan.

FIGURE 6

Critical IT Objectives - Tasks and Status as at June 30, 2001

Objective 1: To continue with the implementation of the College's finance and student system enhancements and sub-components that still need installation and testing to provide the College with an integrated, functional management information system.

Tasks	Status
1. Generate data for various internal and external reports, including: • Statistics Canada, • COPSE, • enrolment statistics, • student tax forms (T2202s), • graduate lists, and • graduate survey.	**Significant progress made.** Based on our review of the MIS Steering Committee minutes and discussion with officials, we determined that the system was generating data for all reporting requirements other than data for Statistics Canada. We were advised that Canadian colleges in general have not been able to generate the required information without significant manual review and analysis. This is, in part, due to the changing information requirements by Statistics Canada.
2. Test financial and student system module patches before placing the upgraded system back into production.	**Task completed.**
3. Fix the sponsored billing module that is not working.	**Little progress made.** At the time of our review, the CIS Department had not received the required "patch" from the software supplier. The CIS Department cannot correct this problem until the software supplier provides the "patch".
4. Implement the following flags on students records: • students with outstanding balances; • sponsored students (band students, student in receipt of employment insurance, etc.); • students who have or will receive student loans; and • apprenticeship students.	**Significant progress made.** Based on our review of MIS Steering Committee minutes and from discussion with officials, we determined that the CIS Department had completed their work on this system enhancement. However, at the time of our review, due to the timing of the completion of this enhancement and the College's enrolment cycle, the College had not put the improved system into production. We were advised that the student "flags" would be used during the Fall 2001 registration process.
5. Setup implementation and training for the new report writing software.	**Little progress made.** We reviewed the MIS Steering Committee minutes and determined that difficulties with the implementation of the report writing software delayed completion of this project.
6. Implement the degree audit module of the College's student system to assist with spring 2001 graduation: • Enhance the equates and equivalencies module of the College's student system to enable the College to equate two or more courses to one course. • Write rules as a pre-requisite to implementing the degree audit module.	**Task completed.**
7. Purchase additional user licenses for the College's financial and student system as software becomes operational throughout the College.	**Task completed.** Additional user licenses continue to be added by the CIS Department as required.
8. Implement the project accounting module of the College's financial and student system to enhance accounting capabilities with respect to Contract Training.	**Task terminated.** We were advised that after further review, officials determined that the project accounting module for the College's MIS system was too costly and too complex to provide a cost-effective solution for recording and monitoring Contract Training activities. As a result, the CIS Department was exploring other alternatives that would provide a better "value-for-money" solution.

FIGURE 6 (CONT'D.)

Critical IT Objectives - Tasks and Status as at June 30, 2001

Task	Status
Objective 2: To identify a Human Resource system that is integrated with the College's payroll system.	
9. Review HR system options that would be compatible with the College's current database.	**Task deferred.** As an interim measure, until an appropriate HR system is found, the CIS Department developed a routine that interfaced the payroll system with the College's MIS system. In addition, a routine using a database program was developed to capture HR data, but had not been implemented at the time of our audit.
Objective 3: To continue with implementation of the Disaster Plan recommendations to help ensure continuous operation of the College's information systems.	
10. Purchase and install a larger uninterruptible power supply (UPS).	**Task completed.**
11. Install a fire suppression system in the computer room.	**Task completed.**
12. Standardize and purchase one type of tape drive.	**Task completed.**
13. Ensure server backups happen regularly.	**Task completed.**
14. Test the UPS interface expander.	**Task completed.**
15. Buy spare personal computers.	**Task completed.**
16. Purchase and keep spare maintenance kits for printers.	**Task completed.**
17. Equip all wiring closets with UPS.	**Task completed.**
18. Add the Internet Service Provider's hardware to UPS.	**Task completed.**
Objective 4: To prepare for an upgrade to the operating system software to meet the College's academic and administrative operating requirements.	
19. Purchase software licenses for the new version of productivity software for all College computers.	**Task completed.**
20. Purchase a newer version of the College's operating system software.	**Task completed.**
21. Upgrade the hard drives for approximately 300 PCs.	**Task completed.** While the CIS Department initially intended to only "upgrade" hard drives of existing computers, $200,000 in additional funding allowed them to purchase new computers.
22. Upgrade the network software on the main server.	**Task completed.**
Objective 5: To upgrade the College's backup hardware to meet the increased requirements of the new management information systems.	
23. Purchase three new backup tape drives in the main computer room.	**Task completed.**

2. ARE INFORMATION TECHNOLOGY SYSTEMS AND SERVICES ADEQUATELY MEETING THE NEEDS OF USERS?

WHAT WE CONCLUDED

We concluded that while College staff believe that systems and services have improved over the last two years, additional system and service enhancements are required to ensure that:

- **staff are satisfied with the nature and quality of information available;**
- **staff and students can rely on the technology;**
- **staff and students have timely access to assistance; and**
- **staff and students have access to the IT training they require.**

We reached this conclusion by examining the following criteria in relation to four basic user needs:

Timely, accurate and relevant information

2.1 Staff should be satisfied with the nature and quality of information generated by the information system.

Reliable technology

2.2 Service levels should be defined and monitored.
2.3 User requests for changes to systems or reports should be effectively managed.
2.4 Formal standards and procedures for supporting information technology should be in place.
2.5 Complete asset management records should be maintained to account for information technology components.

Assistance in using technology when needed (including manuals)

2.6 User requests for information and assistance should be resolved appropriately.

Training in the use of technology

2.7 Staff should have access to training opportunities.

Criteria were derived from standards for controlling information technology issued by the Canadian Institute of Chartered Accountants, and the Information Systems Audit and Control Association.

Understanding user satisfaction

Many organizations have made a significant investment in their IT infrastructures. This investment would include the cost of computers, software and IT support staff. To ensure that they are receiving value for their investment, organizations should periodically determine the level of user satisfaction with IT systems and services.

By measuring user satisfaction, organizations can better determine if user needs are being met and can identify opportunities to improve services. In addition, by measuring user satisfaction at regular intervals, an organization can determine whether its improvements in IT services are, over time, resulting in the desired effects.

We found that the College and the CIS Department have not developed a process to formally measure user satisfaction with IT systems and services. As a result, as part of our audit process, we conducted a staff satisfaction survey. We achieved an overall response rate of 57%. The results of the survey are discussed in pertinent sections throughout this report. We found the survey useful in identifying areas where service improvements could be made. We believe that the College could benefit in a similar way by conducting regular surveys and in using the results to plan service improvements.

WHAT WE FOUND

2.1 The Need to Ensure Users are Satisfied with the Nature and Quality of Information and Reports

Organizations invest significant resources to ensure that information systems produce timely, accurate, and relevant information. If required information is not generated by the system, or if it is not timely, the organization may not be as efficient in pursuing its objectives and in processing its transactions as it should be. For example, staff may pursue other avenues to obtain the information they require, such as maintaining their own data files, spreadsheets or offline databases instead of relying on the main information systems.

We did not conduct an audit of the adequacy of the information and reports generated by the College's various systems. In our view, one of the best measures for the adequacy of information generated is the level of user satisfaction. As such, we gained insight into this area by surveying staff on their satisfaction with information received.

Overall, we believe the survey responses indicate that the College should continue pursuing improvements to the information and reports generated by its information systems. While the survey results indicate a generally high overall satisfaction with the functionality of College systems (88% satisfied), staff reported lower satisfaction with available reports and information (57% satisfied), with one in 5 staff (20%) dissatisfied with available reports and information, and 23% "neutral", neither satisfied nor dissatisfied.

Of particular note, respondents rated reports and information from two systems - the financial system and the student system - as "above average" for importance, but rated them "below average" for satisfaction. For the financial system, 83% of respondents rated the information and reports as important, but only 63% were satisfied. For the student system, 86% of respondents rated the information and reports as important, but only 34% were satisfied. We believe the above noted "gaps" between the respondents' ratings of importance and satisfaction indicate that there is a need to improve user satisfaction with the information and reports from these systems.

Some of the common concerns noted by respondents included:

- difficult to extract needed information from the system;
- systems not user friendly/cumbersome;

- delays in getting information because of limited direct access to information on these systems; and
- information not always up-to-date or timely.

While the survey results indicated that user satisfaction with information and reports could be improved, respondents did recognize that improvements had been made. Sixty-four percent (64%) of respondents reported that information and reports from the financial system had improved over the last two years. Similarly, 58% of respondents also reported improvements to information and reports from the student system.

As noted in Section 1.3, the College's MIS Steering Committee has been actively working to improve the function of various components of the financial and student systems.

R5 We recommend that the College continue to improve the relevance, timeliness and accuracy of reports and information available from the College's financial and student systems.

COLLEGE RESPONSE

The College continues to work on this recommendation. Since completion of the audit, the College has made significant progress in the production of reports that help managers make informed decisions. We still have much work to do in this area, however, improved reporting from the MIS remains a priority for the college.

2.2 The Need to Define and Monitor Service Levels

The level of support that an organization can reasonably expect from an information technology support function is largely determined by the level and quality of human resources made available and the quality of hardware and software. With these factors in mind, an organization should define the service levels expected and provide resources accordingly. Service levels can be defined in a number of ways including system response times, security provided, and system functionality. Expected service levels should be communicated to users and should serve as performance criteria to measure the quantity and quality of service levels achieved. Appropriate actions should be taken to address performance shortfalls.

We found that the College had not defined expected service levels, nor was it tracking actual service levels achieved. Understanding service levels achieved, in relation to expected levels, would help the College determine the adequacy of both its technological capacity and the level of human resources devoted to the CIS Department.

Because expected service levels were not defined or tracked by the College, we could not conduct a direct review and assessment of the adequacy of service levels provided by the CIS Department. Nonetheless, 77% of respondents to our survey indicated that they were generally satisfied with the CIS Department's current service delivery, and 80% of respondents agreed that service had improved over the last two years.

R6 We recommend that senior management define the expected service levels to be provided by the CIS Department and communicate these service levels to users.

COLLEGE RESPONSE

We see value in this for both the CIS Department and the customers. It will provide benchmarks for IT staff and will inform the customer what they may expect. It will also help when dealing with the difficult customer whose expectations are beyond the service level provided by the College.

R7 We recommend management monitor the actual service levels achieved.

COLLEGE RESPONSE

This makes good business sense, but only to the extent that it can be done with limited resources. Since we are a small college we are likely to use informal monitoring of service levels.

2.3 The Need to Manage Requests For Changes to Systems and Reports

Changes to an organization's information systems are inevitable as management responds to the demands of a changing environment. Organizations must carefully manage this change process in order to ensure its information systems continue to address the needs of its users.

Organizations should log requests for changes to a system, assess these requests for needed action, prioritize the requests, and monitor progress made in responding to the change requests. Once a solution has been developed, users should formally test and approve the changes to the system. This helps to ensure that the problem has been appropriately addressed. Dealing with change requests in a timely manner minimizes the likelihood of disruptions to users over a prolonged period of time caused by system errors or systems that do not address important user needs.

We found that the CIS Department did not have a defined process in place for managing requests for changes to systems and reports.

We noted three areas of concern, namely:

2.3.1 requests for assistance were not documented;
2.3.2 service request priorities were not established; and
2.3.3 user sign-offs were not obtained when service projects were completed.

2.3.1 Service requests should be documented

We were advised that typically, requests for services are made orally to CIS Department staff and that service requests are not formally documented. This increases the potential for forgetting or losing track of requests.

2.3.2 Requests for service should be prioritized

When assessing whether, or how quickly, user service requests should be acted upon, an organization should:

- determine the urgency of the change and the impact on the organization of not proceeding;

- understand the risks associated with the change including the effect of the change on system controls and the impact on other systems or processes;
- develop a contingency action plan in case of unforeseen delays or problems that may occur during the system change, particularly when undertaking major system changes;
- outline the activities that must take place prior to implementing the change; and
- estimate the cost of resources to make the change.

We found that the CIS Department followed an informal process when prioritizing service requests and did not document what factors were considered in arriving at decisions. Because of the lack of documentation, we were unable to determine whether specific requests for changes were acted upon in a timely and prioritized manner.

2.3.3 Users should sign off regarding satisfaction with work completed

The CIS Department does not obtain a formal user sign off when a service request or system change has been completed. In addition, the CIS Department does not require that a formal test plan be developed or that test data be maintained.

R8 We recommend that the CIS Department strengthen their process for managing requests for changes to systems or reports.

COLLEGE RESPONSE

Since this audit was completed, a Help Desk has been set up. The process around the operation of such a service will significantly strengthen the process for managing requests. With respect to reports, our goal to make data available in a manner so that individuals can generate their own reporting as needed. This will be accomplished with SAFARI, a newly installed reporting tool. This will ultimately significantly reduce the requests that come to CIS for reports.

2.4 The Need to Develop and Document Standards and Procedures for Supporting the Technological Infrastructure

Standards and procedures for supporting an organization's technological infrastructure are important because they help prevent, or minimize the impact of, disruptions in computer services. The risk of disruptions is reduced because:

- computer hardware and software are more likely to be installed, configured and operated in a consistent and appropriate manner; and
- other support functions, such as recovering from computer system "crashes", backing up data, and maintaining hardware are more likely to be performed in a timely and orderly fashion.

We found that the CIS Department had no documented procedures and standards for supporting the technological infrastructure. Staff relied on verbal communication regarding the support needed, and their knowledge of the hardware and software components that make up the infrastructure.

R9 We recommend that the CIS Department establish and document minimum standards and procedures for supporting the technological infrastructure.

COLLEGE RESPONSE

We support this recommendation. Since this audit was done, progress has been made in this area. Progress will take considerable time without dedicated resources. Since there are no plans to add additional resources to the department, the only way this could be accomplished in a more expedite manner would be to ignore the day to day work that must be done to maintain the infrastructure and provide adequate on-going customer support. The College puts itself at some risk related to system failures without this documentation in place, however, as progress continues to be made it continually reduces future risks.

2.5 The Need to Develop Policies and Procedures for the IT Asset Management System

Maintaining complete records of information technology assets is a necessary component of an organization's efforts to manage and safeguard those assets. Asset management records should identify information technology components and associated information, such as physical location, serial and model numbers, configuration details and software licenses. These records are an important control feature because they help an organization account for all information technology components, and are essential in conducting periodic verifications of physical existence. In addition, when configuration details are noted, these records facilitate the efficient management of changes to technological infrastructure components.

We found that the CIS Department maintained an IT asset management system that included appropriately detailed information on the IT assets at the College. In addition, management advised that the CIS Department annually verified the accuracy of the IT inventory by comparing their records against the actual equipment on hand. We tested the accuracy and reliability of the information on this system and found that the information on the system was correct and accurately reflected the IT inventory of the College.

We noted, however, that there were no documented policies and procedures for the system. Documenting the policies and procedures for operating and maintaining the IT asset management system would help ensure that required procedures are not inadvertently overlooked and would assist new staff to appropriately operate the system.

R10 We recommend that policies and procedures for operating the IT Inventory System be developed.

COLLEGE RESPONSE

We agree that this should be done, however, it will receive a much lower priority than many of the other recommendations in the audit report. We noted that the audit found the college was following good processes and had excellent control management of its IT inventory – we simply don't have the processes well documented and supported by formal policies.

2.6 The Need to Better Manage User Requests for Assistance

Within any organization, system users will periodically require on-the-job assistance. Therefore, technical assistance should be available to ensure that problems experienced by users are appropriately resolved and to promote the proper use of computer hardware and software. An IT department should record all requests for assistance and should monitor the progress made in resolving problems. Guidelines should be established for determining the priority of problems and the most appropriate staff person to refer them to. In addition, an IT department should also identify outcome-oriented performance measures for providing assistance and track and report on its performance.

We identified four problems related to the provision of technological assistance by the CIS Department:

2.6.1 a help desk function was not established;
2.6.2 a listing of requests for assistance was not maintained;
2.6.3 guideline for prioritizing requests were not developed; and
2.6.4 outcome oriented performance measures were not developed.

2.6.1 A help desk should be established

We found that the CIS Department did not provide assistance through an established help desk function. We were advised that when staff need assistance, they contact the CIS Department and IT staff respond as available. It was further noted that students generally do not contact the CIS Department directly, but will seek assistance from their instructors. If their instructor cannot help them, the instructor will contact the CIS Department on the student's behalf.

We asked staff if they believed that service to both staff and students could be improved if the College operated a separate dedicated help desk. Seventy-six percent (76%) of staff agreed that a "dedicated help desk" was needed to provide "fast help" to both staff and students regarding computer hardware and application software problems.

In our survey, we asked staff to comment on how responsive the CIS Department was to their requests for assistance. While 55% of respondents believed that they received "immediate" attention to their requests, 16% believed they waited longer for help than they would have reasonably expected. In addition, 10% of respondents reported that their problems were not resolved. Of the 115 suggestions made by staff for improving the support services from the CIS Department, the most common suggestion was that "technical help should be more available" (24% of suggestions).

We also interviewed a small representative sample of students at the College. While students reported that they were generally satisfied with access to computers and with the level and quality of support services they received during regular class time, they were not satisfied with access to technical assistance during evenings and weekends.

R11 We recommend that the College establish a "help desk" to better meet the assistance needs of both students and staff.

COLLEGE RESPONSE

This is something the College has wanted to resource for the past few years. We are pleased that through a retirement we were able to re-

allocate resources to staff such a desk. This desk was set-up in September 2002. Once the person in this position becomes familiar with the job, she will also contribute to attaining other recommendations contained in the audit.

2.6.2 Requests for assistance should be documented and their status monitored

We were advised that requests for assistance are submitted to the CIS Department by a variety of means including e-mail, in-person, and by telephone. We noted that the CIS Department did not maintain a listing of requests for assistance received. As a result, requests could be lost or forgotten.

2.6.3 The process for establishing priorities should be better defined

CIS Department staff advised that they gave top priority to requests for assistance that occurred during the actual delivery of a class, followed by administrative system problems, and finally other staff and student problems. If they could not resolve a problem, they would consult with the Manager, Computer and Information Services.

We found, however, that there were no documented guidelines for providing assistance to staff, including prioritizing requests and escalating the handling of requests. As a result, there is increased potential for the inconsistent treatment of similar requests for assistance.

2.6.4 Outcome-oriented performance measures should be developed and tracked

We found that the College had not developed any performance measures for the provision of assistance by the CIS Department, nor had the CIS Department gathered any performance information. Examples of outcome-oriented performance measures include satisfaction ratings from user satisfaction surveys, CIS Department response time, and the number of assistance requests resolved.

In addition, accumulating information on inputs, such as the number, time of day and nature of assistance requests, would be useful in managing CIS Department resources, in justifying the resources for a help desk function, and in troubleshooting more problematic systems that could require broader corrective actions.

R12 We recommend that the CIS Department:

- **develop documentation requirements and prioritization guidelines for assistance requests received; and**
- **identify, track, and report outcome-oriented performance measures for its assistance activity.**

COLLEGE RESPONSE

This recommendation is related to and somewhat dependent upon the staffing of a help desk. This recommendation can be met in conjunction with the implementation of a help desk.

2.7 The Need to Improve the Availability, Quality, and Timeliness of Staff Training Opportunities

In order for an organization to maximize the value it receives from investing in information technology, an organization must ensure that staff receive appropriate and timely training on the systems and automated productivity tools available to them.

We reviewed staff training opportunities provided by the College. We found that during the last two years the College had provided staff with a number of opportunities to participate in productivity software training, including using spreadsheets, word processing, presentation software, data base applications, and the Internet. In 1999/00, the College offered 20 two-hour training sessions, covering the above noted topics, that were attended by 93 staff. In 2000/01, 34 one-hour sessions were offered and 55 staff attended. In addition, the College provided in-house training on the financial and student systems on an "as needed" basis to new users.

Notwithstanding the College's efforts to meet staff training needs in the area of information technology, the survey results indicate that expectations have not been adequately met.

While an organization may not be able to satisfy the training needs of all staff, many respondents to our survey reported that IT training for staff could be improved:

- While 57% of respondents agreed with the statement "I am provided with training on how to use systems applicable to my job", 28 %, or more than one in four employees, did not agree with this statement. Of the 116 training suggestions made by staff, the most requested training was for productivity software such as word processing, spreadsheets, presentation, and data base software (37%). Respondents also requested training on the College's financial and student systems (20%).
- While 46% of respondents agreed that the training they received provided them with the necessary knowledge they needed, 41 % disagreed.
- While 44% of respondents agreed that the training was provided in a timely fashion, almost the same amount (41%) disagreed.

In addition, we noted that approximately 50% of respondents to our survey indicated that they were not satisfied with the availability and usefulness of user manuals, instructions, and on-line help.

We also asked a small representative sample of students at the College if they were satisfied with the IT training available to them. The students reported that generally they were satisfied with the computer training they received. However, approximately one-half of the students interviewed suggested that user instructions and manuals should be easier to understand. Students interviewed also reported that individual student training needs varied greatly depending on the course a student was enrolled in, previous exposure to computers at school or the work place, and the availability of a computer at the student's residence. They pointed out that while some students have had significant previous exposure and are fully proficient with computers, for others, their first real "hands on" experience with computers was in College classes. The students recognized that meeting these varied needs was a challenge for the College.

R13 We recommend that the College conduct a more detailed assessment of the IT training needs of staff.

COLLEGE RESPONSE

The College will further explore this recommendation. While the College knows that training is needed and that it could perhaps be doing a better job in this area, it is also recognized that many staff do not take advantage of training opportunities that have been offered in the past.

3. ARE INFORMATION TECHNOLOGY PURCHASES MADE WITH DUE REGARD FOR ECONOMY AND EFFECTIVENESS?

WHAT WE CONCLUDED

We concluded that the College's IT purchases for 2000/01 were made with due regard for economy and effectiveness.

We reached this conclusion by examining the following criteria:

3.1 The technological infrastructure (computers, including the operating systems and the peripheral components, and common application software) should be standardized to an appropriate extent.
3.2 Purchases should be based on an appropriately conducted tendering process.

An additional aspect in ensuring IT acquisitions are effective involves having an appropriate planning process to guide acquisition priorities. In our view, effective acquisitions are those which support the business and academic objectives of the College, promote the efficient functioning of the IT infrastructure and support functions, and meet user needs. IT planning processes are discussed in Question 1. As noted in Section 1.1, the College had not developed a multi-year IT strategic plan that operationalized the IT objectives reflected in the College's Strategic Plan. As such, we were unable to determine the appropriateness of the 2000/01 purchases in relation to the College's strategic goals.

WHAT WE FOUND

3.1 The Technological Infrastructure is Standardized to an Appropriate Extent

We found that the main elements of the IT infrastructure at the College were standardized to an appropriate extent.

Computers

At the time of our audit, there were approximately 650 computers in use at the College. We identified purchases of 141 computers in 2000/01 and 199 computers in 2001/02. This level of computer replacement is in keeping with the CIS Department's targeted five-year life cycle. We note that the purchases were compatible with the existing infrastructure.

The CIS Department developed minimum requirements for computers and other IT equipment. We found that all of the main hardware components connected to the network met or exceeded the College's minimum standards. In addition, we were advised that the CIS Department annually updated its specifications for the purchase of desktop computers. For 2000/01, the specifications for PC purchases were a Pentium III 800-megahertz computer with 128-megabyte SDRAM and a 30.7-gigabyte hard drive. We determined that the 2000/01 computer purchases met these specifications.

Software

The useful life of software is dependant on a number of factors including:

- the software needs of both academic and administrative staff;
- software updates and upgrades; and
- new "better" software as it becomes available.

We were told that the CIS Department continually monitored available upgrades and enhancements and made changes to software as circumstances allowed. During our audit, we noted that the CIS Department was in the process of upgrading the College's operating system and productivity software (spreadsheet, word processing, etc.) to a more current version of the software. We were also told that the CIS Department endeavored to make upgrades available to both administrative and academic staff at the same time to help ensure standardization and increase maintenance efficiency.

3.2 The Need to Appropriately Document the Tendering Process and Bid Analyses

Tendering purchases helps to ensure that the lowest price is paid for the quality and quantity of product required. Essential elements of an effective tendering process include:

- documented policies and procedures;
- clearly defined specifications for the equipment or service to be provided;
- solicitation of quotes from several suppliers to ensure competitive bidding on the tender;
- clearly defined selection criteria that include not only the price, but also other critical factors such as quality, delivery time, and product warranties; and
- documented analysis of quotes received to support the selection decision.

We examined twenty-four 2000/01 purchase orders valued at $987,800 or 87% of total IT purchases for 2000/01. We noted that the purchase orders were appropriately approved by the CIS Department prior to issuance. We found that 15 of these purchases ($679,600 or 69%) were supported by tenders. The remaining nine purchase orders ($308,300 or 31%) were not tendered. We determined that there were appropriate reasons for not tendering these purchases as follows:

- Five of the purchase orders ($186,000 total value) were for software from the sole supplier of the required software.
- The remaining four purchase orders ($122,300 total value) were for hardware where the College had received special educational discounts from the manufacturers. We were advised that in these instances, all distributors of the equipment would charge the College the same discounted educational institution price. As a result, there would be no price benefit to tendering. The College issued these purchase orders to two existing suppliers that management believed had, in the past, provided satisfactory service to the College.

For the 15 purchases that were tendered, eight tenders were issued (six in 2000/01 and two in 1999/00). We noted that standards or requirements for IT equipment, services, delivery dates, and warranties were clearly specified in the request for quotations. However, we are concerned that:

3.2.1 purchasing policies and procedures were not documented;
3.2.2 the analyses of vendor quotes to support purchasing decisions were not documented; and
3.2.3 tenders for purchases greater than $100,000 were not posted on MERX.

3.2.1 Purchasing policies and procedures should be documented

The CIS Department's purchasing practices were not supported by documented policies and procedures.

Documenting purchasing policies and procedures would help ensure that all staff are aware of the approved IT purchasing policies and procedures and would help foster continued economic and effective purchases.

R14 We recommend that the College document IT purchasing policies and procedures.

COLLEGE RESPONSE

See recommendation 15 for College response.

3.2.2 The bid analyses and rationale for purchasing decisions should be documented

For the six tenders issued in 2000/01, we looked for evidence of the CIS Department's analysis of the bids received, and documentation of the rationale for the final selection of a vendor. For five of the six tenders, we found insufficient documentation to support the CIS Department's analysis of bids and selection of the successful vendor.

We noted that a minimum of four bids had been received for each tender. We re-performed the bid analyses and determined that for each tender awarded, the CIS Department had selected the most economical vendor that met all of the selection criteria.

Documenting bid analyses would help to ensure that there is appropriate support for the CIS Department's vendor selection decisions. Such analyses would help demonstrate that the "best" supplier was selected without prejudice, and would help protect the College if the selection process was ever challenged or questioned. In addition, the documentation would act as a reference to aid in making similar purchase decisions in the future.

R15 We recommend that the CIS Department prepare and retain documentation of the analysis of quotations and the rationale for vendor selection decisions.

COLLEGE RESPONSE

This is another case where current practices and procedures are very good, but we should have documentation. We ultimately want to meet this recommendation, but there are many recommendations that are of a higher priority.

3.2.3 Tenders for purchases greater than $100,000 should be posted on MERX

The Agreement of Internal Trade (AIT), which came into effect in July 1995, provides a "framework to ensure equal access to procurement for all Canadian suppliers". The AIT required that, effective July 1, 1999, all purchases of goods and services over $100,000 and construction valued over $250,000 be subject to a national tendering process. In Manitoba, Colleges and Universities were instructed to comply with the AIT, and could post and distribute tenders on the MERX system, an electronic tendering bulletin board, at no charge.

We found that the two IT equipment purchases that exceeded $100,000 in value were not electronically advertised by the College on the MERX system.

R16 We recommend that the College post tenders for purchases greater than $100,000 on MERX.

COLLEGE RESPONSE

Care will be taken in the future to make sure such tenders are posted on MERX.

4. IS THE COLLEGE TAKING APPROPRIATE ACTION TO MINIMIZE THE RISK OF UNAUTHORIZED ACCESS TO ITS COMPUTER NETWORKS?

WHAT WE CONCLUDED

We observed that many actions to promote appropriate security have been taken and acknowledge the awareness and concern by the CIS Department for adequate security. However, the College's increasing reliance on technology and the use of the Internet have significantly increased the security risks faced by the College. In light of this environment, we concluded that the College should take additional actions to minimize the risk of unauthorized access to its computer networks.

We reached this conclusion by examining the following criteria:

4.1 An organization should perform a periodic assessment of its security environment and take action to reduce risks and threats.
4.2 Controls to physically safeguard IT assets should be in place.
4.3 Controls to limit electronic access to information and systems should be in place.
4.4 Infrastructure configuration should promote a secure environment.
4.5 Security policies and procedures should be in place.

WHAT WE FOUND

4.1 The Need for Periodic Security Reviews

Managing the security risks associated with physical and electronic access to information, hardware and software is an essential element in safeguarding an organization's investment in information and related technology. As a result, an organization should periodically assess the effectiveness of security controls in place. To be practical and cost effective, the rigor of the assessments should be commensurate with the sensitivity of the information, and the value of hardware and software. Deficiencies and concerns arising from the assessments should be resolved on a timely basis to ensure controls are adequate to safeguard hardware from theft or damage, and software and information against damage, loss, unauthorized use, disclosure, and modification.

We were advised that the College had not recently performed a formal security review.

In our discussions with CIS Department staff, we found a high degree of security awareness. As a result, the CIS Department has been able to provide a reasonably sound level of security.

We believe, however, that the CIS Department's ability to continue ensuring adequate security is complicated by a number of factors including:

- multiple College locations and long distances between locations;
- requirement for heightened levels of security as the College continues to increase the services available on the College web site and expands its use of technology; and
- limited resources available.

R17 We recommend that the College periodically assess the adequacy of its IT security measures.

COLLEGE RESPONSE

The College does do this on a regular on-going basis. The on-going assessment is often informal with minimal documentation due to time/ resource constraints. The College is not likely to engage outside consultants to assist in this activity as we do not see a significant cost/benefit for the expenditure incurred, beyond what College CIS staff can do themselves.

4.2 Controls to Physically Safeguard IT Assets are Adequate

We determined that the College had taken appropriate steps to protect its investment in hardware, software, and information from physical threats such as fire, theft, and vandalism. We noted that:

- Physical access to network equipment was well controlled. Servers and other network equipment were kept in a secure locked room.
- While access to the College was not restricted, there was a security kiosk in the main hallway that monitored activities throughout the College by using strategically placed video cameras.
- We noted that fire extinguishers were checked on a regular basis and that Emergency Evacuation Instructions were posted at main intersections and locations.

4.3 The Need to Better Restrict Electronic Access

A secure organization must ensure that systems and data are protected from unauthorized electronic access. This is required to protect systems and data from alteration, loss, and unauthorized use. Electronic access can occur from network connections, dial up connections and web site connections.

We identified concerns regarding:

4.3.1 the protection of transmitted information;
4.3.2 the adequacy of password controls; and
4.3.3 the monitoring of access attempts and Internet usage.

4.3.1 Transmitted information should be better protected

We were advised that the College did not encrypt data when transmitting between College locations over the Internet. Some of this data would include sensitive or private data such as personal and health information.

R18 We recommend that the College encrypt sensitive information when transmitting between locations.

COLLEGE RESPONSE

The College recognizes this as a necessary part of running a college, and is pursuing this activity.

4.3.2 Password controls should be strengthened

We noted that the College did not require students and staff to use a random alphanumeric combination in establishing their passwords. Typically, many computer users pick a password that is easy to remember, such as their name or student number. Such passwords, however, can be easily guessed by others. Prior to the introduction of the Internet, such passwords did not pose a significant security concern. However, potential access through the Internet significantly increased the College's exposure to unauthorized users and heightened the need for more rigorous password controls.

We were told that a few instructors would not allow students to change passwords or would insist on knowing the changed password in order to access assignments in the student's account. This practice caused a complete breakdown in the password and access controls and should be discontinued immediately.

R19 We recommend that the College strengthen the password controls by educating all users on the importance of using more complex passwords.

COLLEGE RESPONSE

The College has taken steps to strengthen its password controls, and will continue to do so as technology changes.

R20 We recommend that instructors be directed not to seek access to student accounts and that assignments be placed in a separate shared directory set up for that purpose.

COLLEGE RESPONSE

The College has promoted this system to instructors this academic year. Some have taken advantage of the new directory structure.

4.3.3 Access attempts and Internet usage should be monitored

We found that the College had not activated the log preparation features of its various software programs and as such had not reviewed access attempts or Internet usage. The preparation and review of these logs is central to detecting unauthorized access attempts or identifying inappropriate use of the Internet.

As a result, CIS Department staff were not aware of unauthorized network access attempts nor were they aware of the Internet sites being viewed through College computers. Information on access attempts would help the College identify and rectify key vulnerabilities. Likewise, by monitoring Internet use, CIS Department staff could determine if College staff or students were accessing web sites deemed inappropriate by management and take appropriate action to "block" access to these sites or remove a user's access to the Internet.

In addition, the College could further limit its potential liability from the possible misuse of the Internet by using a logon banner to inform users of its monitoring policies and practices, as well as its policy against using the Internet for illegal or inappropriate purposes.

R21 We recommend that the College monitor for unauthorized network access attempts and Internet usage.

COLLEGE RESPONSE

The College continues to search for cost effective software to monitor both these issues. The College feels it has put sufficient resources into security to have confidence that unauthorized access is extremely difficult. Software to monitor network access attempts would simply verify this to us. Monitoring Internet usage is done to some extent by instructors and other staff at the college, whenever possible. The College tries to balance teaching/learning freedom while ensuring legal issues are covered.

4.4 The Need to Ensure the Infrastructure Configuration Better Promotes a Secure Environment

An organization should ensure that its infrastructure configuration is sufficient to support its security measures. The infrastructure includes not only the computers and networks, but also the connections between various locations.

With respect to the College's infrastructure configuration, we identified several opportunities to decrease the risk of unauthorized access to its systems. These were brought to management's attention in a separate report. Among the issues reported was the need to better segregate internal networks. Publicly accessible servers, including Web Servers, were connected directly to the College's internal network rather than being placed on a separate service network inside the firewall.

R22 We recommend that the College better segregate its internal network from publicly accessible servers.

COLLEGE RESPONSE

The College considers its current method to provide adequate security in a cost effective manner. Although full implementation of this recommendation would give the appearance of greater security, it would likely cost considerably more than our current system. Further consideration will be given to this recommendation if and when more funds become available.

4.5 The Need to Develop and Communicate Security Policies and Procedures

An organization should develop and enforce appropriate policies and procedures regarding security of hardware, software, data, and electronic communications. Policies help ensure that users do not unknowingly jeopardize the organization's security measures.

We found that the College had not developed comprehensive security policies. In this report, we identified a number of areas where security could be strengthened. These areas should be supported by appropriate policies and procedures.

We also found that little had been done to communicate the importance of information systems security to staff and students. Users who understand the importance of security policies and procedures are more apt to comply.

R23 We recommend that the College develop and implement policies and procedures to promote a sufficiently secure IT environment.

R24 We recommend that the College develop and implement a security awareness program for all staff and students.

COLLEGE RESPONSE

The College agrees with these recommendations, however, implementation will have to be phased in as resources can be made available. Small steps may be taken that move us in the general direction of the recommendations.

Excerpt: The Auditor General Act

Audit of operations

14(1) In carrying out his or her responsibilities under this Act, the Auditor General may examine and audit the operations of a government organization with regard to any of the following matters:

(a) whether financial and administrative provisions of Acts, regulations, policies and directives have been complied with;

(b) whether public money has been expended with proper regard for economy and efficiency;

(c) whether the Assembly has been provided with appropriate accountability information;

(d) whether the form and content of financial information documents is adequate and suitable.

Copies of this report may be obtained by contacting:

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